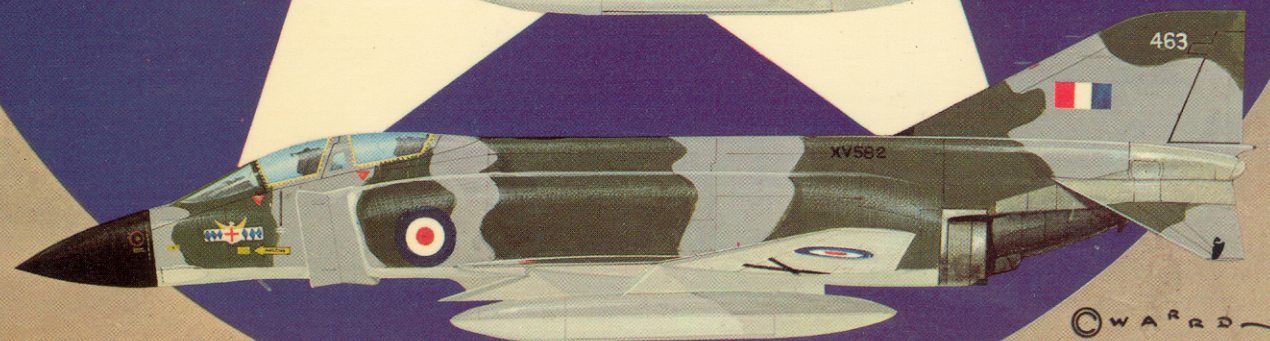
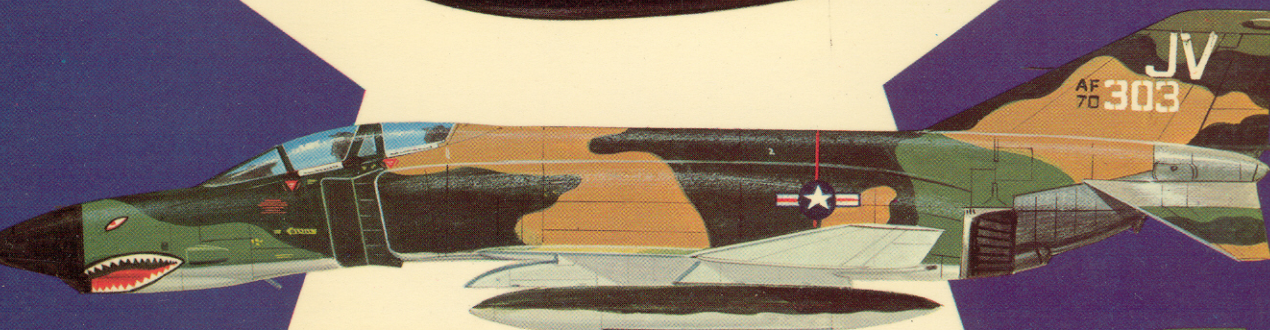
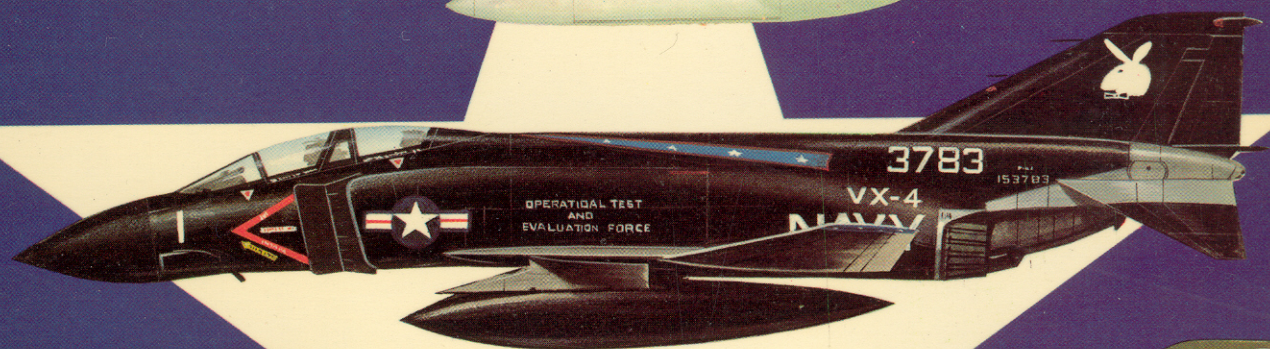
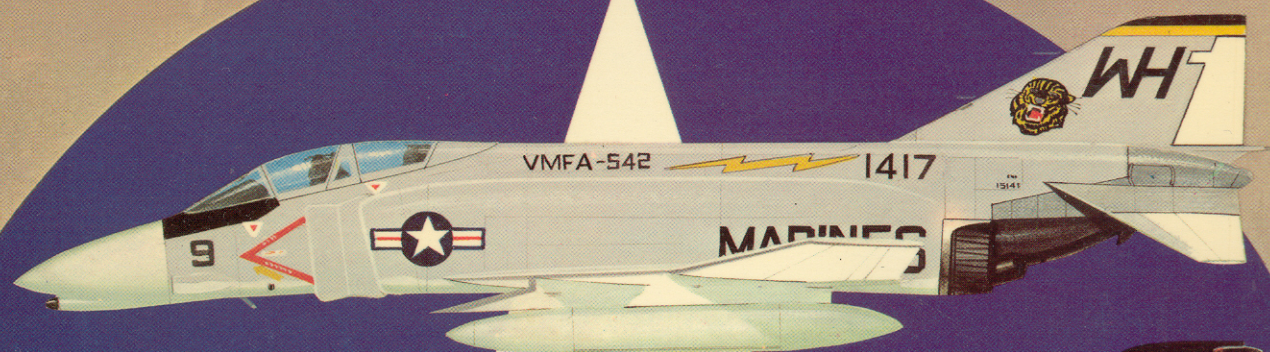
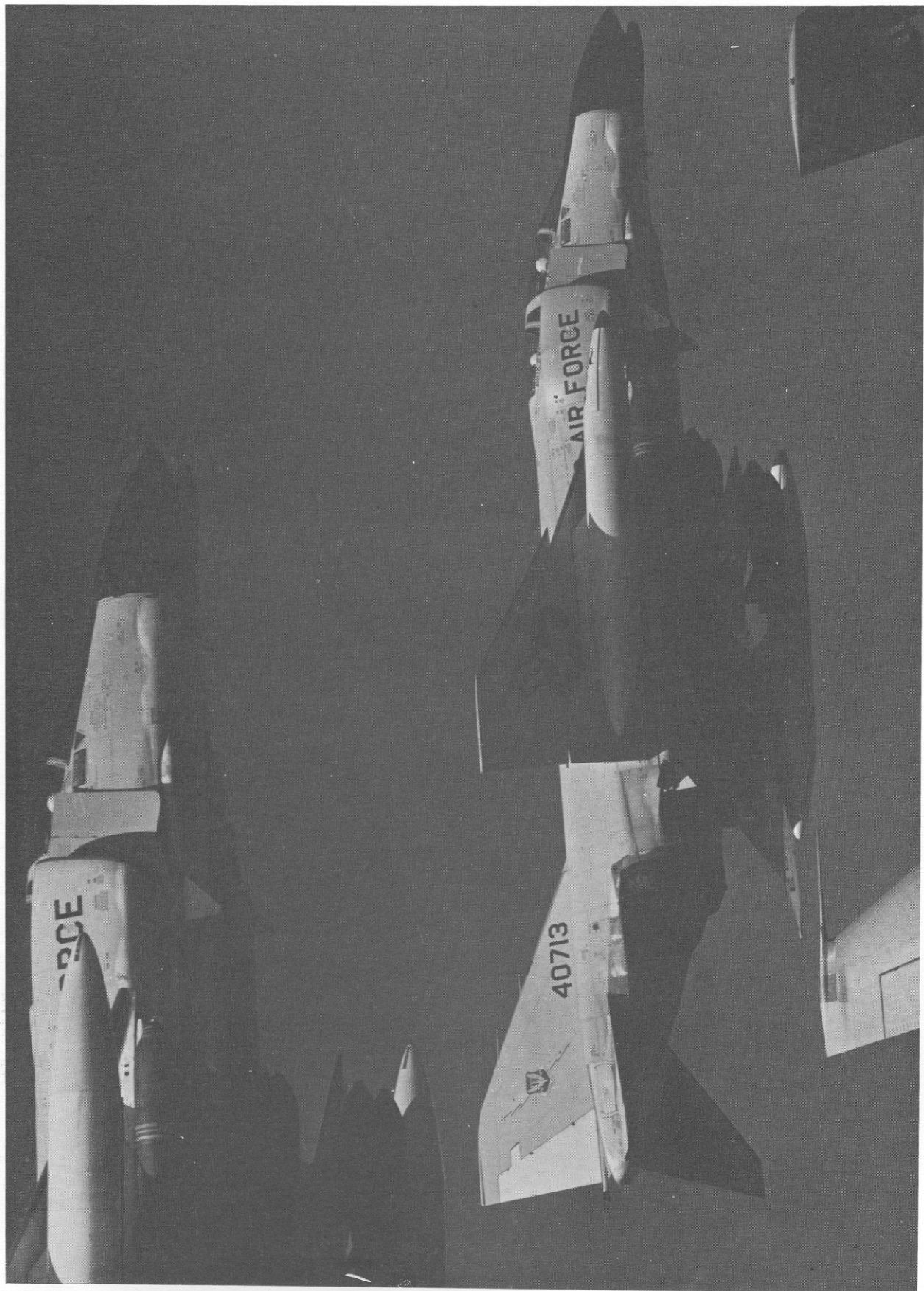


McDONNELL F-4 PHANTOM II

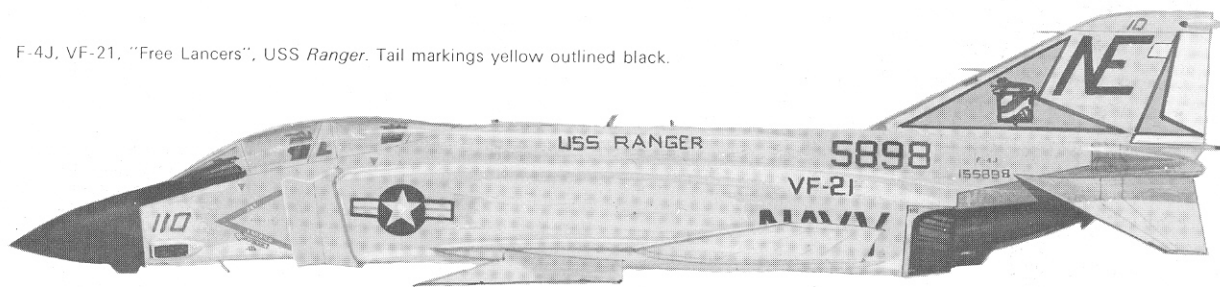
IN USAF-US NAVY-USMC-RAF-FAA-LUFTWAFFE & IIAF SERVICE





Bomb laden F-4C Phantoms forming with a KC-135A tanker en-route to North Vietnam on 6 November 1965. (USAF via R. J. Francillon)

F-4J, VF-21, "Free Lancers", USS *Ranger*. Tail markings yellow outlined black.



McDONNELL F-4 PHANTOM II

IN USAF-US NAVY-USMC-RAF-FAA-LUFTWAFFE & IIAF SERVICE

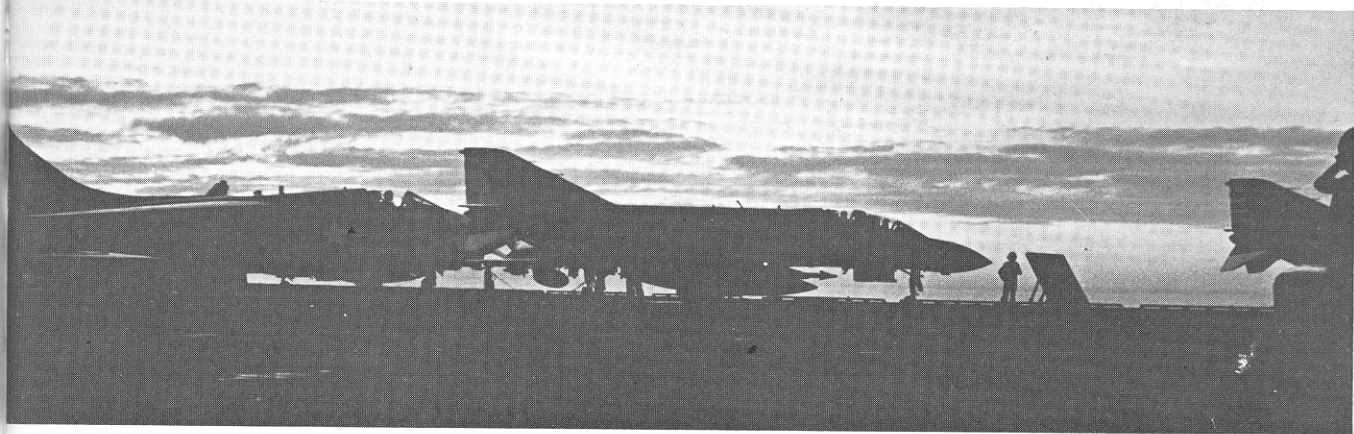
**Illustrated by
Richard Ward**

**Compiled by
Richard Ward
& Rene J. Francillon**

ACKNOWLEDGEMENTS

This second volume of the Phantom II, together with volume one, AIRCAM No. 30, presents within the four covers over three hundred and fifty colour and black and white illustrations of this famous aircraft. This volume covers the USAF in greater detail than the US NAVY and USMC thereby balancing out volume one which concentrated on the US NAVY and USMC. This book should be used in conjunction with volume one in which book will be found the text. Thanks are due to all those who assisted with photographs and information whose names are listed below in alphabetical order: B. Baker, R. Besecker, J. T. Brady, F. C. Dickey Jr., R. J. Francillon, R. Gill, J. G. Handelman, A. P. de Jong, D. A. Kasulka, R. Levy, P. Mancus, P. R. March, McDonnell Douglas, E. R. McDowell, D. W. Menard, Lionel Paul, Rolls-Royce, F. Roos, J. Sullivan, N. Taylor, USAF, US Navy, USMC, T. W. Van Geffen, J.v.d. Woude.

An F-4J silhouetted against the setting sun in the South China Sea on the deck of the USS *Enterprise* in August 1971. (USN)



Published by: Osprey Publishing Limited, England

Editorial Office: P.O. Box 5, Canterbury, Kent, England

Subscription & Business Office: P.O. Box 25, 707 Oxford Road, Reading, Berkshire, England



A period of relative quiet on the flight deck of the USS *Enterprise* as she prowls the waters of the Gulf of Tonkin, off North Vietnam. Crewmen load orange mail sacks on to a C-1A Tracer in the foreground. A-4C Skyhawks, A-3 Skywarriors and an E-1 Tracer may be seen spotted about the deck as preparations are made for the next offensive launch. The F-4B Phantoms belong to VF-92 and VF-96. (USN via R. J. Francillon)



A pair of F-4Bs of VF-11 forming over the Atlantic Ocean on 7 May 1968. (USN via R. J. Francillon)

MCDONNELL F-4 PHANTOM II

The Phantom F-4E, squat and powerful, ugly yet right. Exceeding sixty feet in length and when configured for a MIG CAP mission weighing more than twenty-five tons. With 2,000 gallons of fuel internally and 1,340 gallons externally in drop-tanks the intercept range is not far short of 1,000 miles and the ferry range in excess of 2,000 miles. More than once under combat conditions with MIG-19s over North Vietnam the Phantom has exceeded twelve G's and come home with the wings intact. Wing shape is semi-delta with leading and trailing edge flaps, coupled with these is a boundary layer control system which enables the Phantom to operate off reasonably short runways. The outer wing panels are angled up to provide more stability at high degrees of attack; the tail plane is angled down to compensate for the bent wings rolling tendency when the aircraft yaws. Herewith follows a general specification covering the Phantom F-4E. McDonnell Douglas Corporation. Basic design 1953. First flight May 1958. First flight of production F-4E on 30 June 1967.

SPECIFICATIONS

Span: 38ft. 6ins. **Length:** 63ft. **Height:** 16ft. 3ins.

Weight: Empty 30,425lb. Loaded 60,630lb.

Speed: Stall about 130mph. Maximum 1,500mph plus/Mach 2.27 plus.

Service ceiling: approx. 60,000ft.

Power plant: 2x17,900lb. s.t. with reheat General Electric J79-GE-15 turbo-jets.

Armament: One 20mm M-61A1 rotary cannon, fixed, forward firing at a rate of 6,000rpm.

Provision for up to six AIM-7E Sparrow III radar-guided missiles; four AIM-9D Sidewinder infra-red, heat seeking missiles; or up to 16,000lb assorted external stores.

Range: Ferry 2,000 miles plus with reserves. Intercept 900 miles plus. Air-to-Surface Attack Range: Out to 100 miles in typical high-low mission, depending on bomb loading.

Fuel: 2,000 gallons internal. 1,340 gallons externally.

Fire Control System: Miniaturized, solid-state AN/APQ 120.

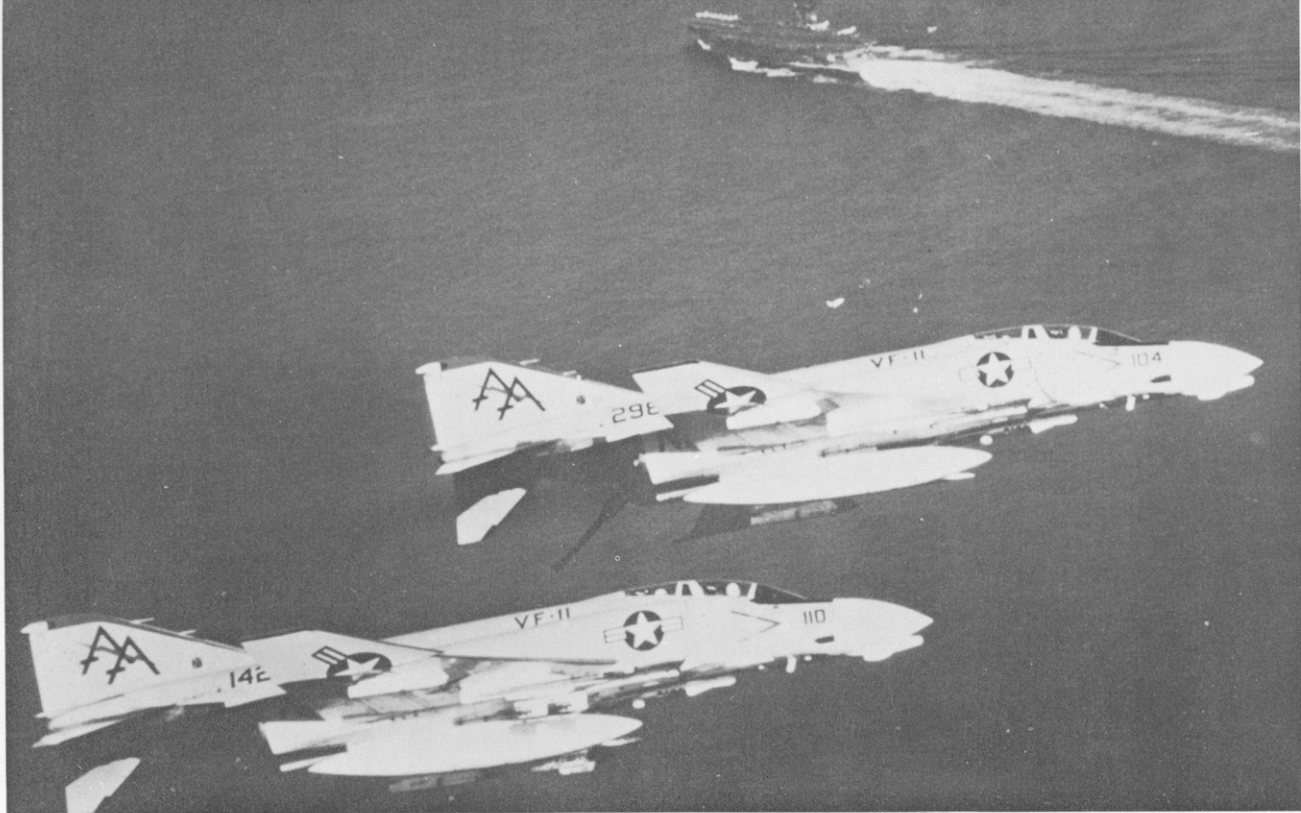
STOL Capability: 3,000ft. or less.

Stores permutations: 18x750lb. bombs; 15x680lb. mines; 11x100lb. bombs; seven smoke bombs; 11x150 gall. napalm bombs; four or six missiles; fifteen air-to-ground rocket packages—in combinations up to eight tons.

Long-range attack with nuclear weapons.

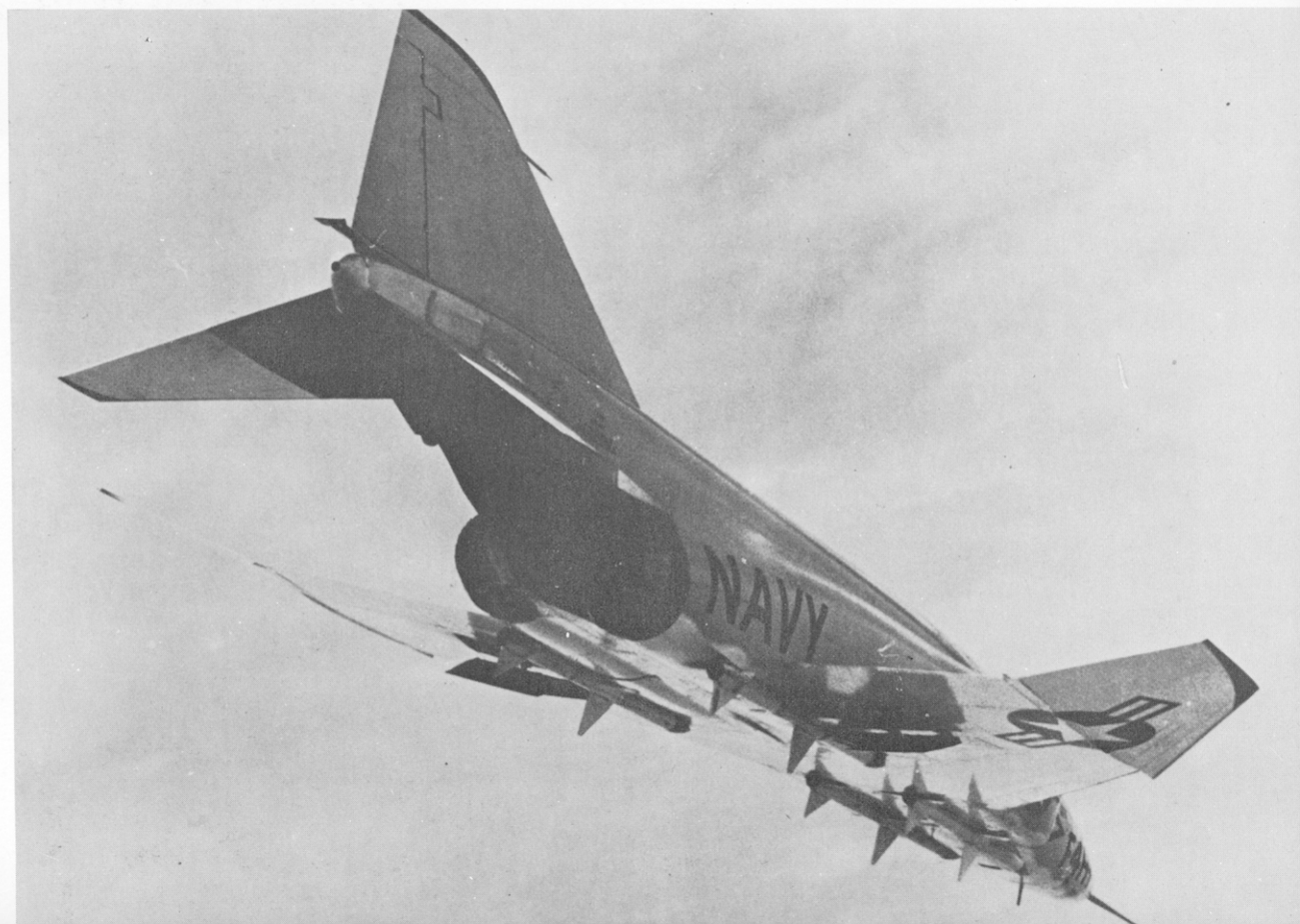
F-4 operating hours to December 1972 in excess of 2,000,000hrs.

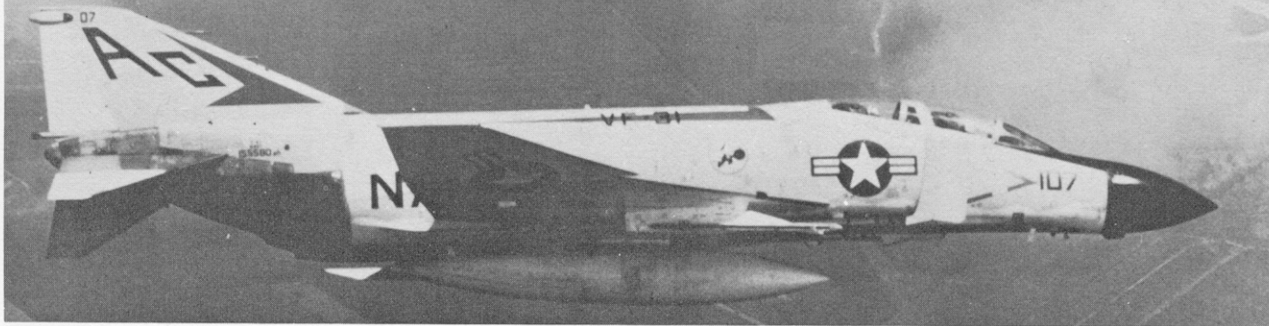
World Records: Fifteen: including high and low altitude speed; altitude; time-to-height; transcontinental speed; closed-course speed; sustained altitude.



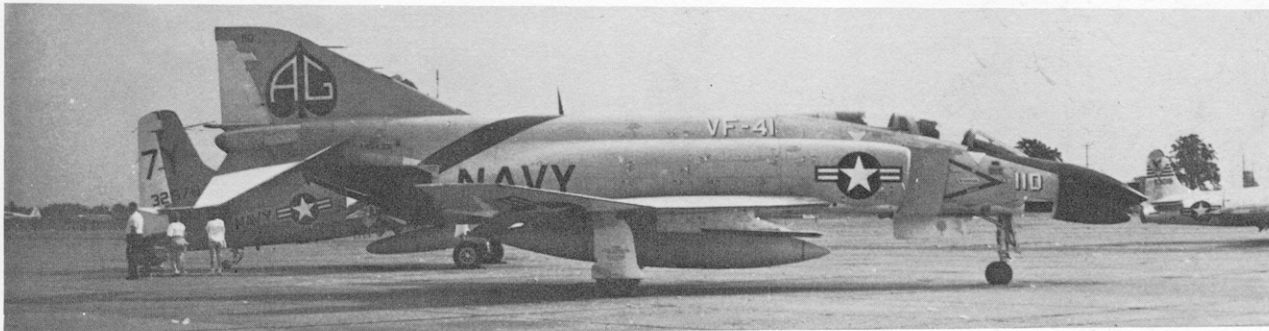
Above: A pair of F-4Bs of VF-11 (151420 and 152980) commencing their approach prior to recovery aboard the USS *Forrestal*. (USN via R. J. Francillon)

Below: Unusual view of manufacturer's F-4H. (McDonnell via A. P. de Jong)

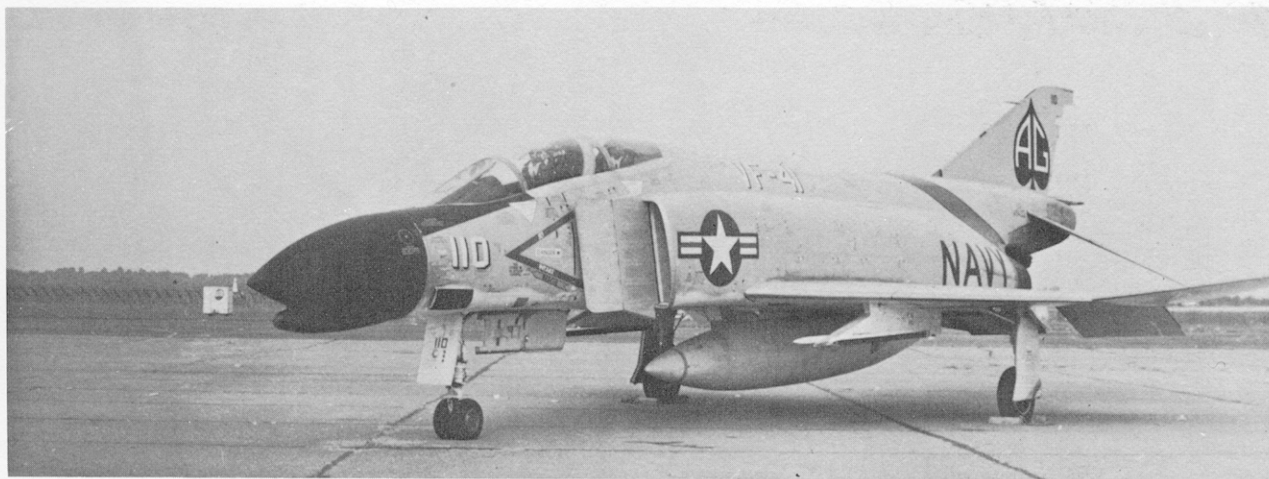




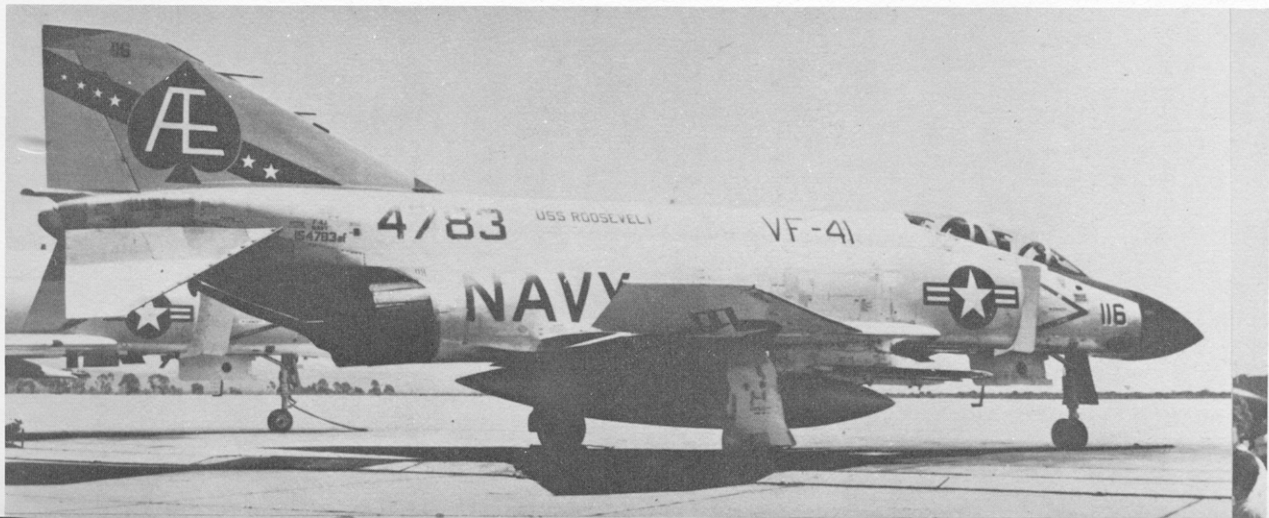
Above: An F-4J of VF-31 "Tomcats" banking over a Naval Air Station, Southern Virginia, 30 July 1968. (USN via R. J. Francillon)

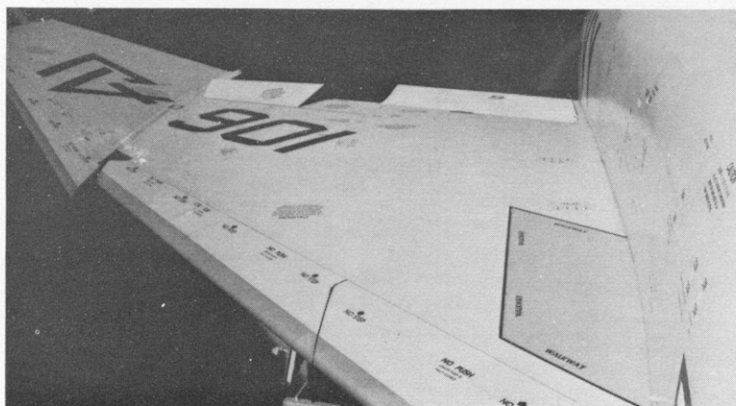
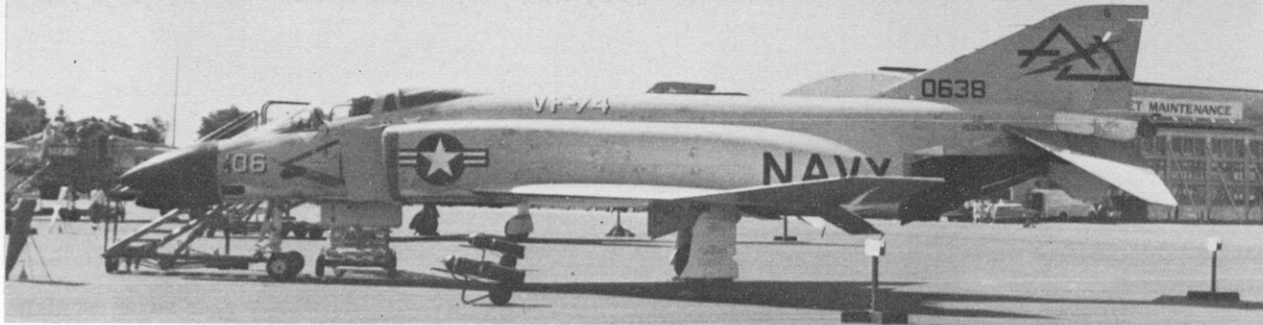


Above & below: 110, an F-4H of VF-41 at Battle Creek, Michigan for a Lafayette Escadrille Reunion Air Show. VF-41 once flew the Ryan FR-1 Fireball. (E. R. McDowell)



Below: Another F-4J of VF-41 photographed at NAS Miramar on 8 February 1969. (E. R. McDowell)



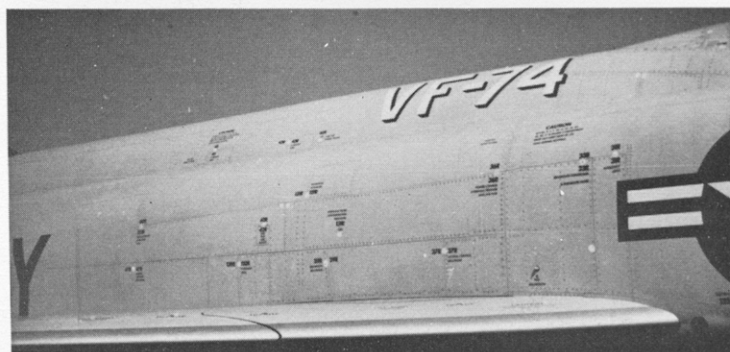


Selection of photographs of an F-4B of VF-74, note stencilling. (E. R. McDowell)





Above & right: Stencil details of 106 of VF-11 on facing page. (E. R. McDowell)

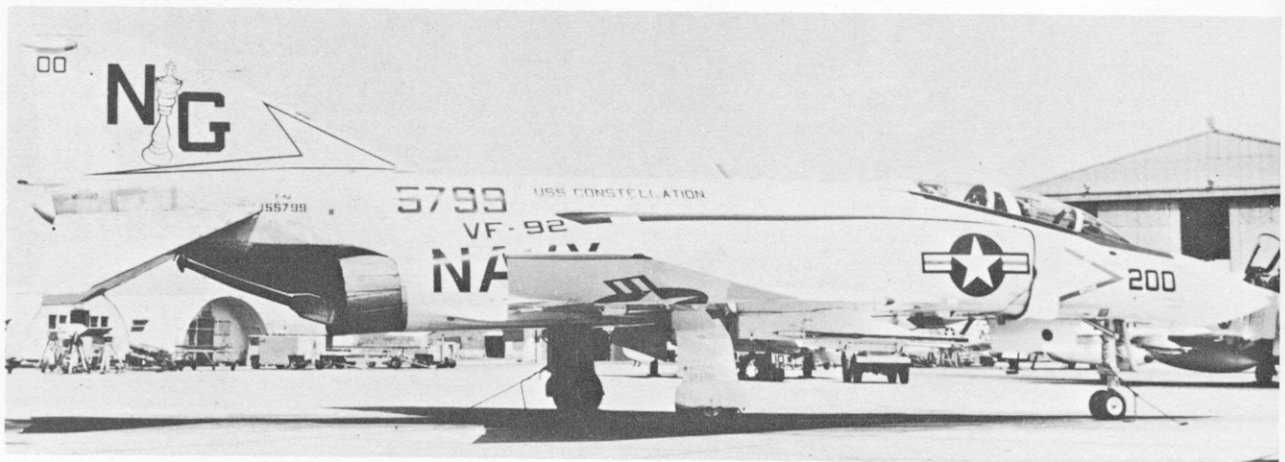


Below: Rear end detail of an F-4B of VF-154.
(J.v.d. Woude)



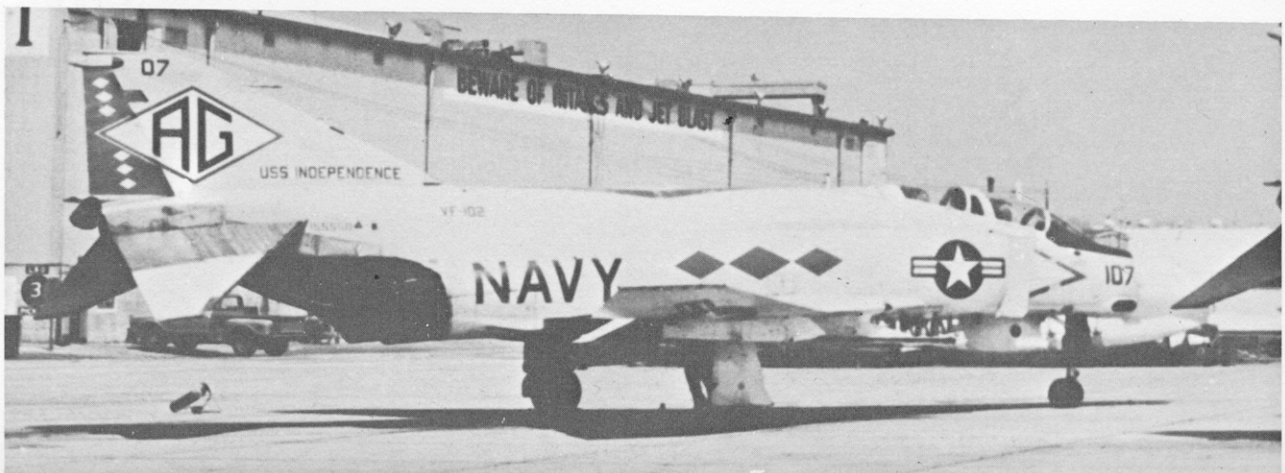


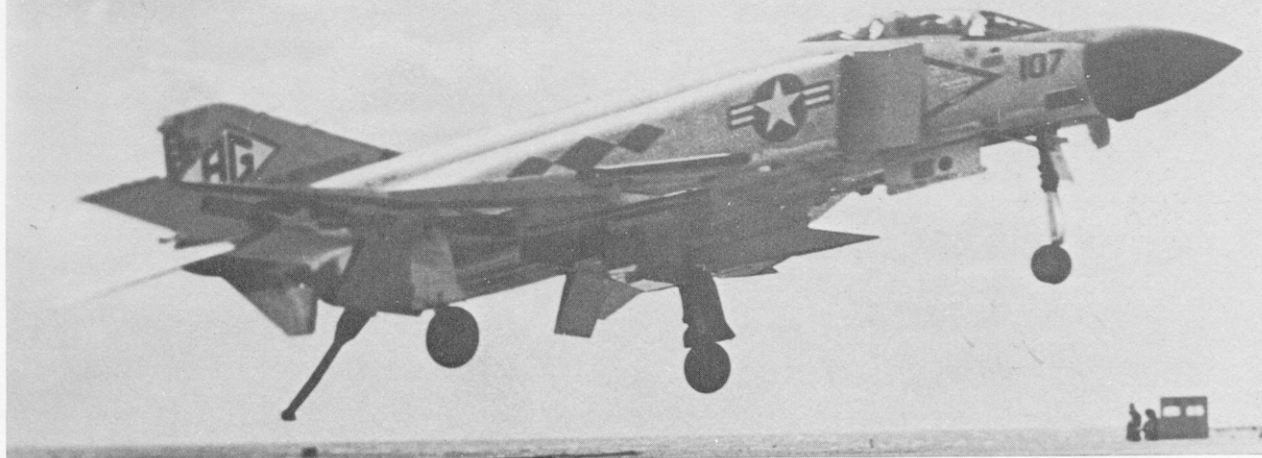
Above: Formation of F-4B Phantoms of VF-84 flying over NAS Oceana, Virginia. (USN via R. J. Francillon)



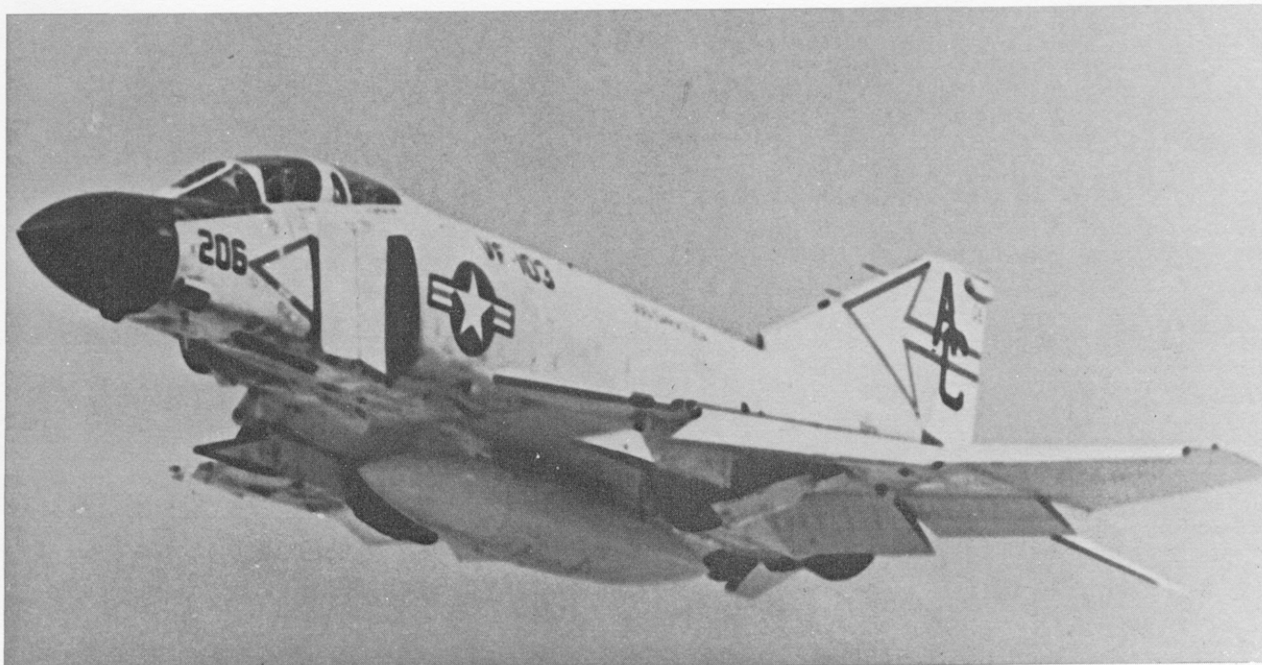
Above: F-4J of VF-92 at NAS Miramar during 1971. (D. A. Kasulka)

Below: F-4J of VF-102 "Diamond Backs" photographed at NAS Miramar late 1969. (D. A. Kasulka)



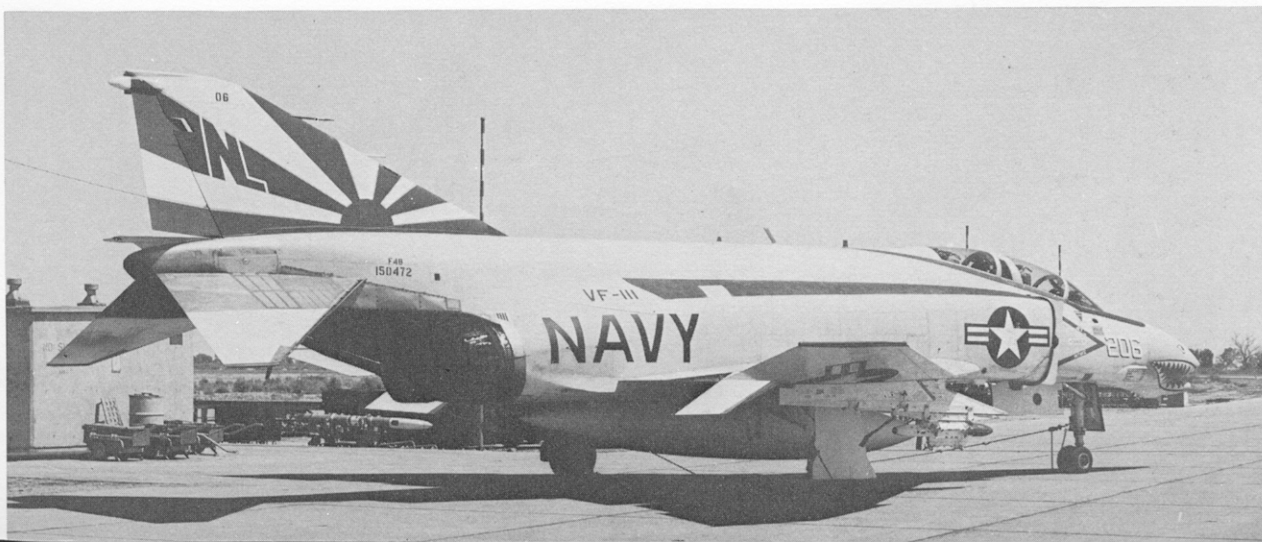


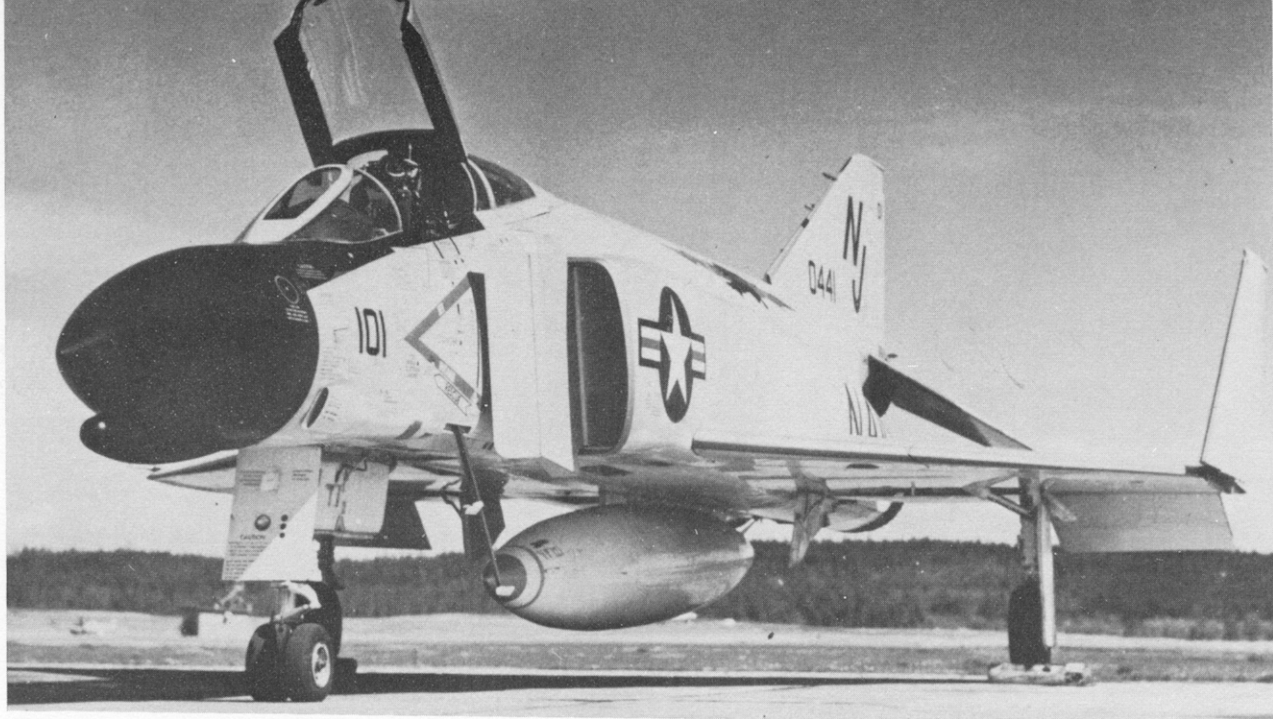
Above: F-4J of VF-102 "Diamond Backs" landing aboard the USS *America*, Atlantic Ocean, late 1969. (USN via R. J. Francillon)



Above: Assigned to the USS *Saratoga*, this F-4J of VF-103 is retracting its wheels after take-off from NAS Rota, Spain, 13 September 1970. (USN)

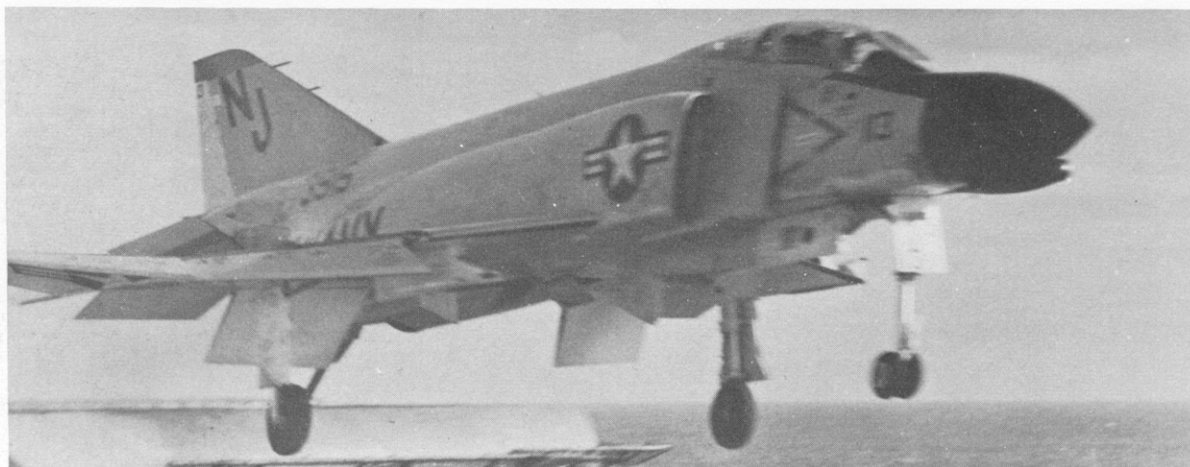
Below: F-4B of VF-111 "Sundowners" at NAS Miramar, California. (Peter Mancus via R. J. Francillon)





Above: F-4H of VF-121, note stencil detail on nose. (USN via J. W. R. Taylor)

Below: An F-4B of VF-121 taking-off from a carrier during 1967. (McDonnell)



Below: An F-4J (155971) of VF-142 "Ghost Riders" launched from the side catapult of USS *Constellation*, Gulf of Tonkin, 24 February 1970. (USN via R. J. Francillon)



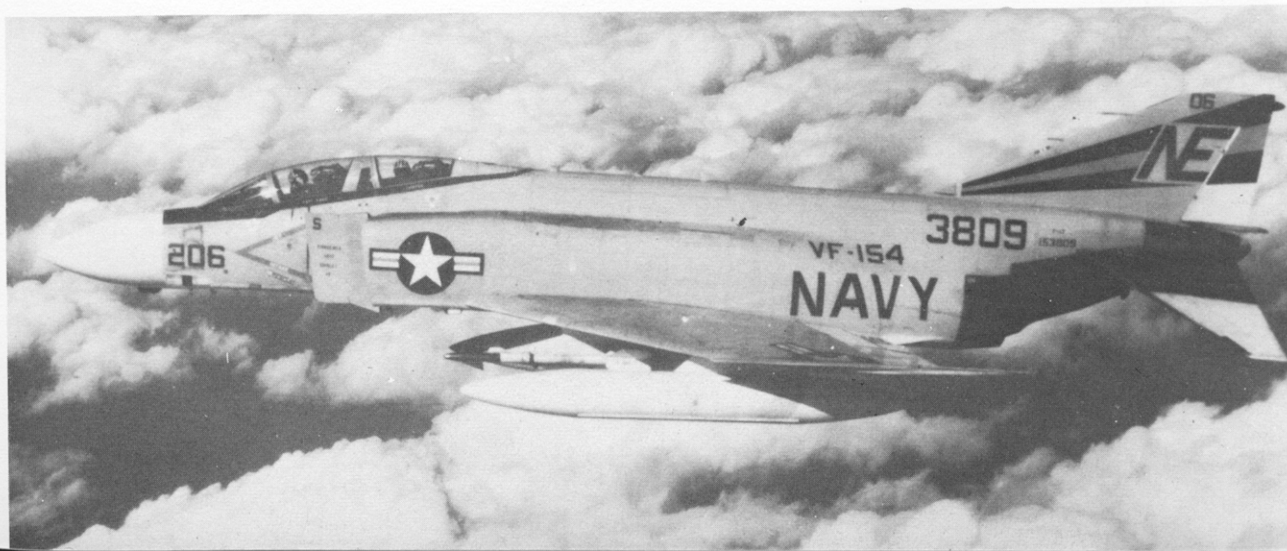


Above: An F-4B of VF-143 "Pukin Dogs" making a pass over the USS *Constellation*, 23 June 1963. (USN via R. J. Francillon)

Below: F-4J (155773) of VF-143 of the USS *Enterprise*. The stripe on upper fuselage and fin on this aircraft is red. (Peter Mancus via R. J. Francillon)

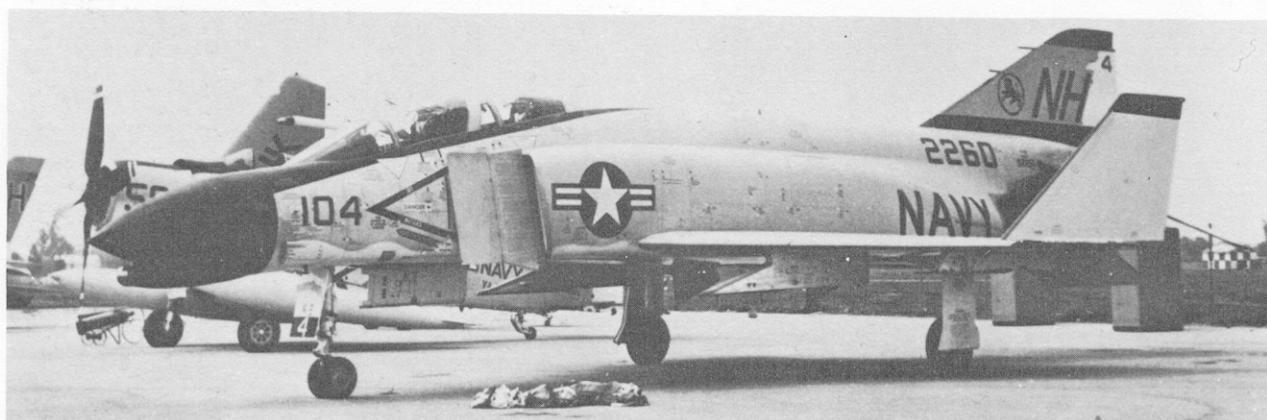


Below: An F-4J of VF-154 on fighter patrol over the Sea of Japan, 10 February 1970. Serial is 153809. (USN via R. J. Francillon)





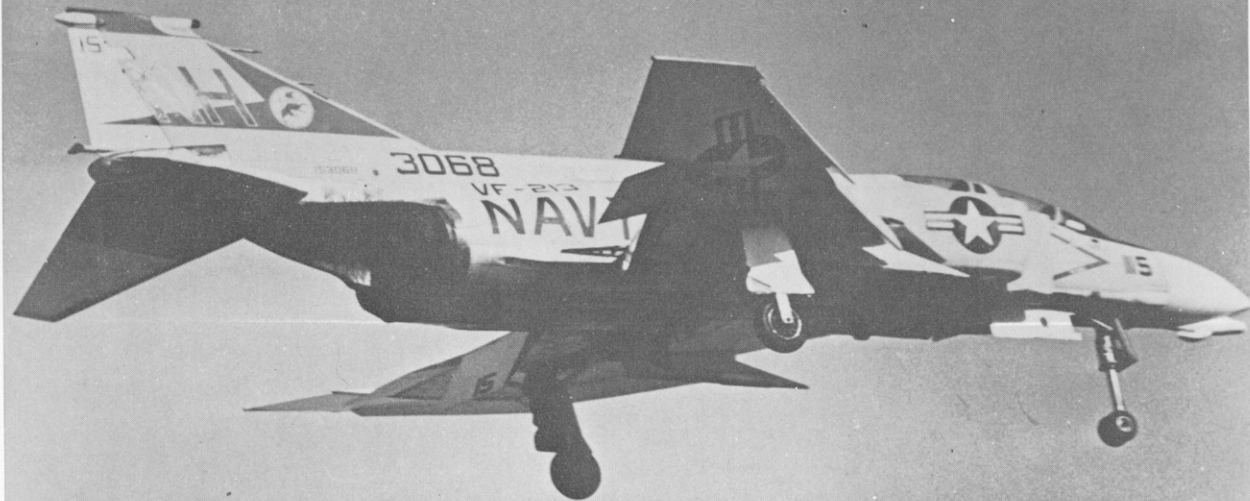
Above: An F-4B of VF-154 "Black Knights" on a bombing raid north of the DMZ, February 1968. (USN via R. J. Francillon)



Above: An F-4G, one of twelve modified F-4Bs of VF-213. (R. D. Archer via J. W. R. Taylor)

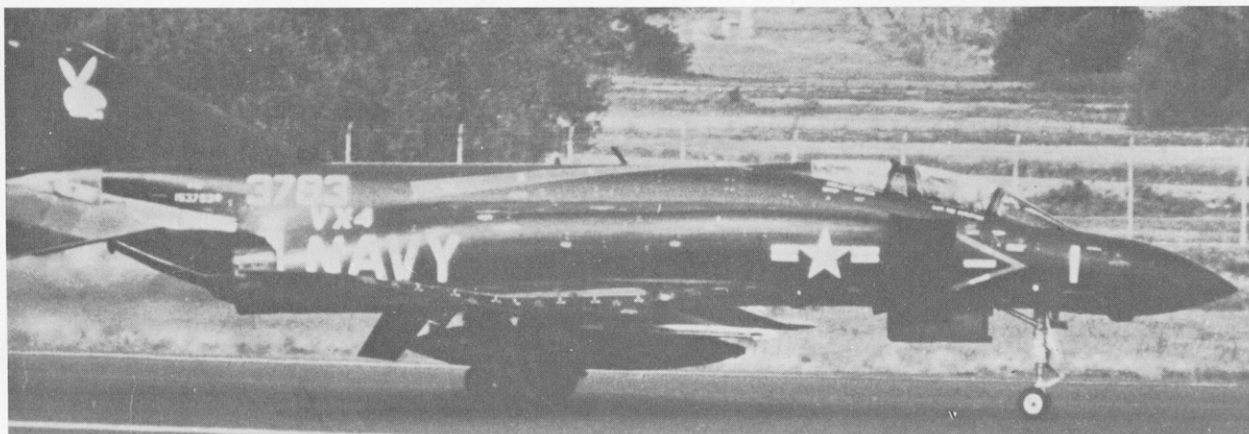
Below: An F-4G of VF-213 "Black Lions" during a tour of duty on the USS *Kitty Hawk* in the Gulf of Tonkin, late 1965. (USN via R. J. Francillon)



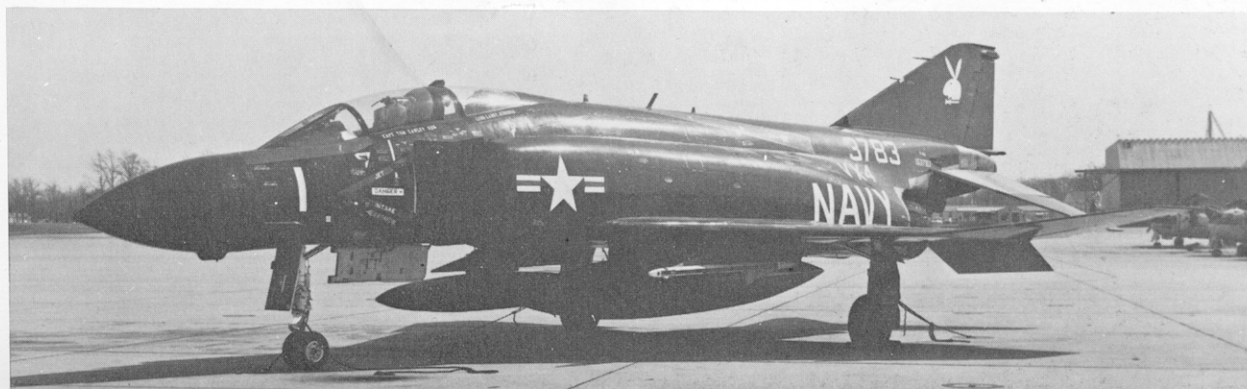


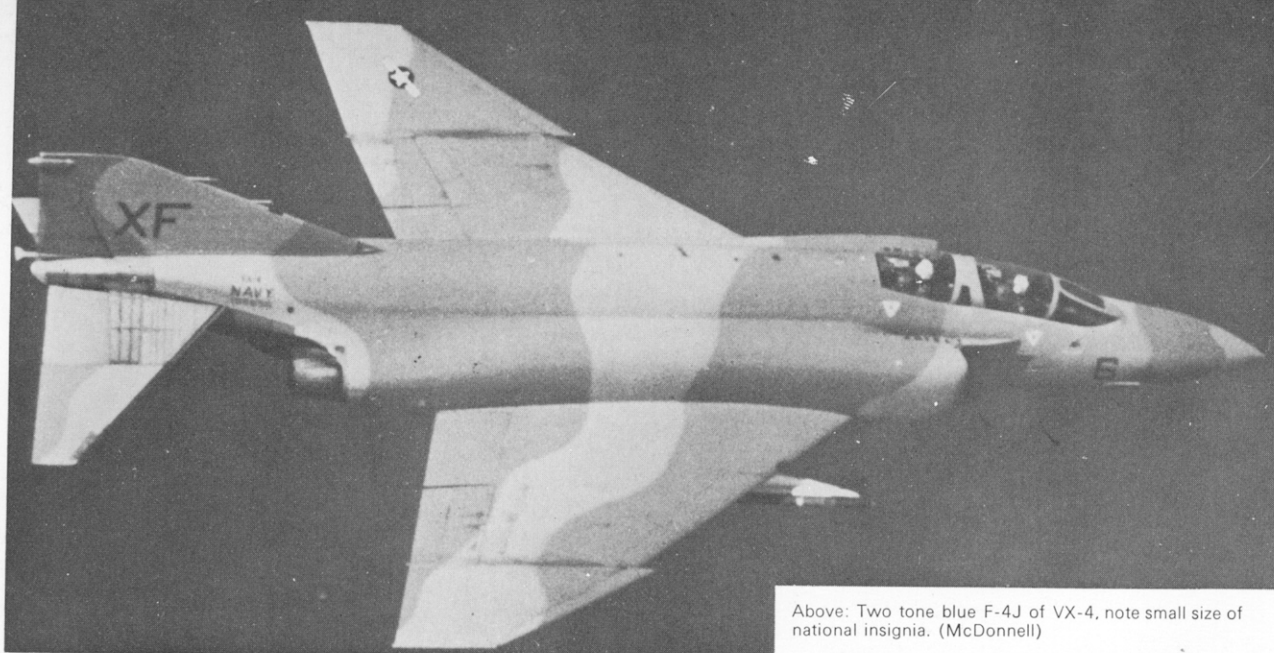
Above: An F-4B of VF-213 coming into land at Lambert Field, St. Louis, Mo. (F. Roos)

Below: Glossy overall black F-4J of VX-4, numbered 9. (J. G. Handelman)



Above & below: Same F-4J as above now numbered 1 and with "Bunny Club" insignia on fin. (Top J.v.d. Woude, lower via R. J. Francillon)





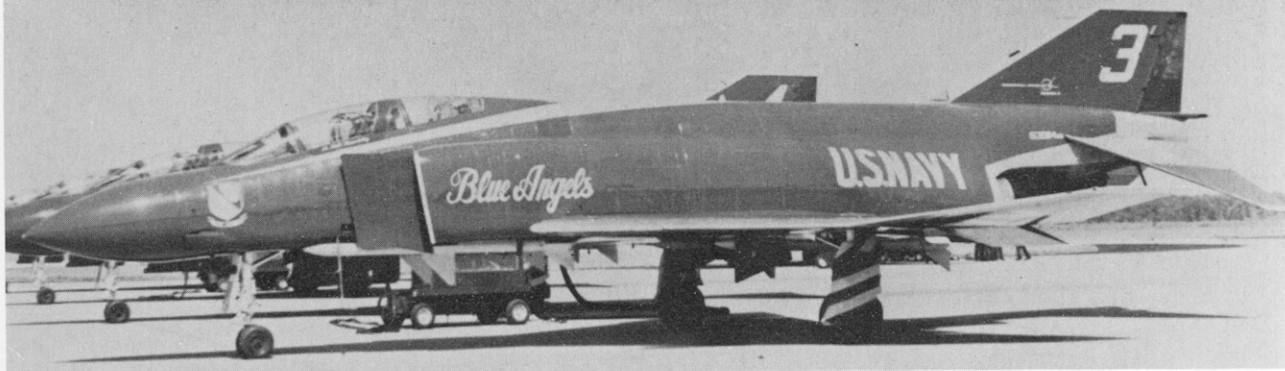
Above: Two tone blue F-4J of VX-4, note small size of national insignia. (McDonnell)

Below: An F-4J of VX-4 flying over Point Mugu, California clearly showing under surface details.
(USN via R. J. Francillon)



Bottom: F-4J (150847) of VX-4 showing upper surface detail; note legend on fuselage reads Operational Test and Evaluation Force. (USN)





Above: F-4J (153084) of the "Blue Angels" Aerobatic Team. (J. G. Handelman)



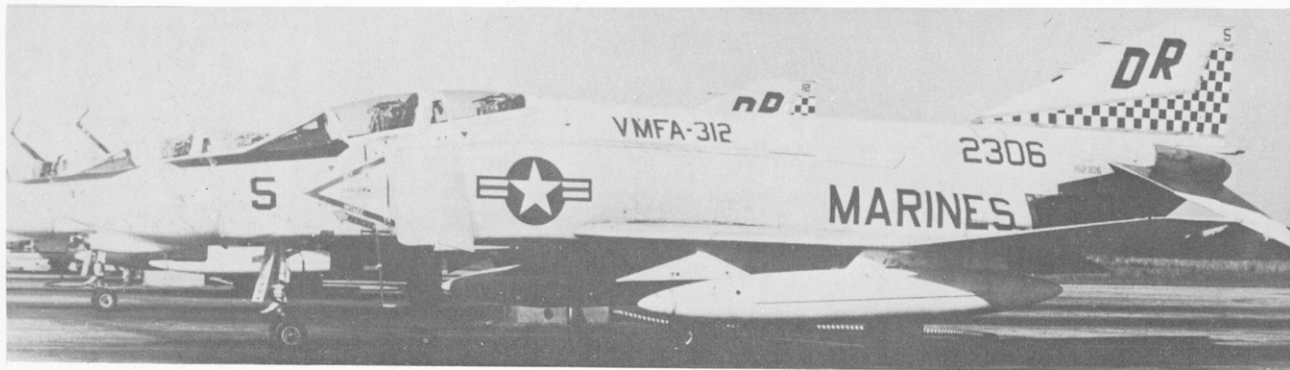
Above: "Blue Angels" in tight diamond formation. Moffett Field, California, 9 August 1969. (USN)

Below: Formation leader of the "Blue Angels" taxiing out for take-off, serial is 153075.

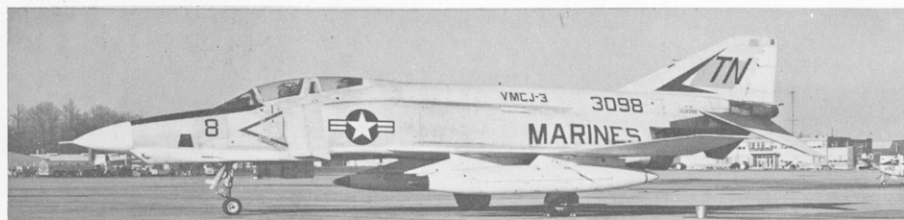




Above: F-4J of VMFA-232 photographed at MCAS El Toro in May 1968. (Serial 153792. (D. A. Kasulka)



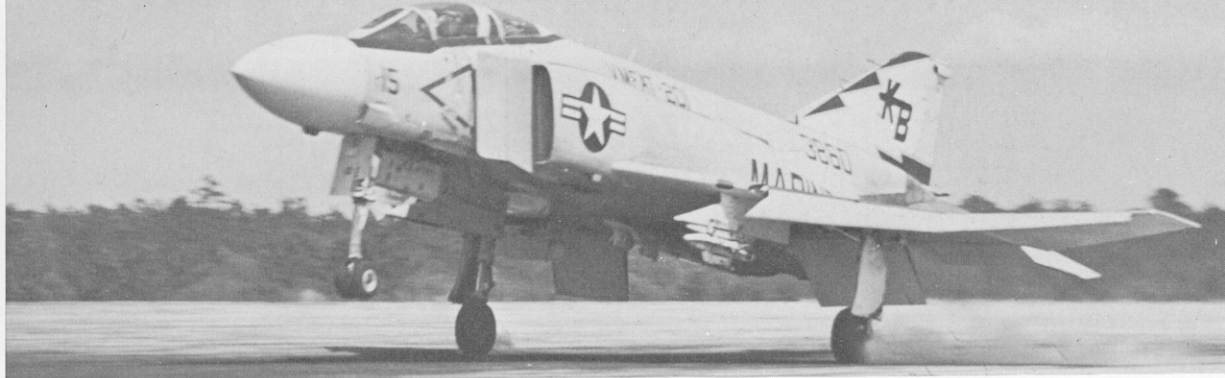
Above: Black and white checker-tailed F-4B of VMFA-312 at MCAS Beaufort in May 1970. (J. T. Brady via R. Gill)



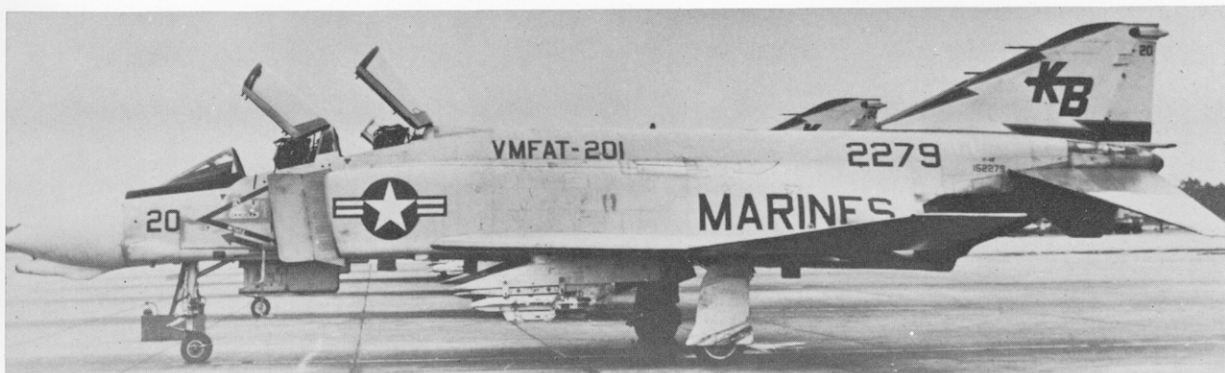
Above: F-4B (149457) of VMFA-314 in flight over MCAS El Toro in May 1962. On 1 August 1963, all Marine Corps All-Weather Fighter Squadrons (VMFAw) equipped with F-4Bs were redesignated as Fighter Attack Squadrons (VMFA). (Defense Dept. via R. Gill)



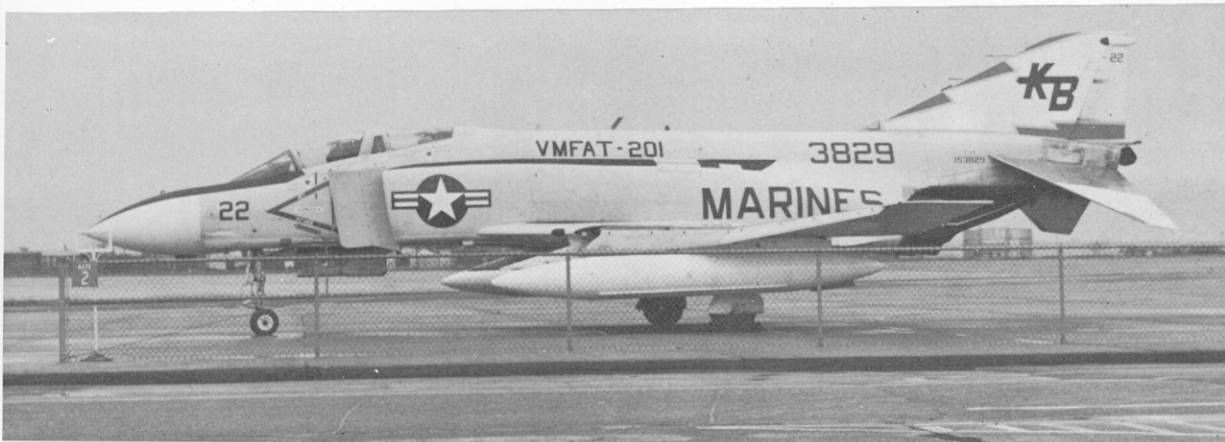
Left & below: Port and starboard views of RF-4C of VMCJ-3, MCAS El Toro, July 1971. Green tail flash. (Top J. G. Handelman, lower R. J. Francillon)



Above: With flaps down and tyres smoking an F-4J (153860) of VMFAT-201 touches down. (J. Sullivan via P. Mancus)

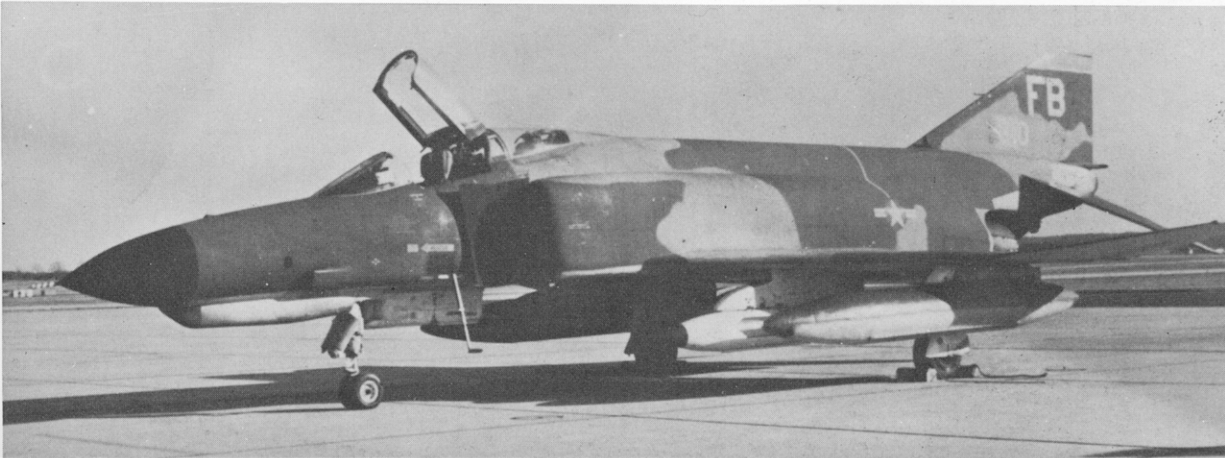


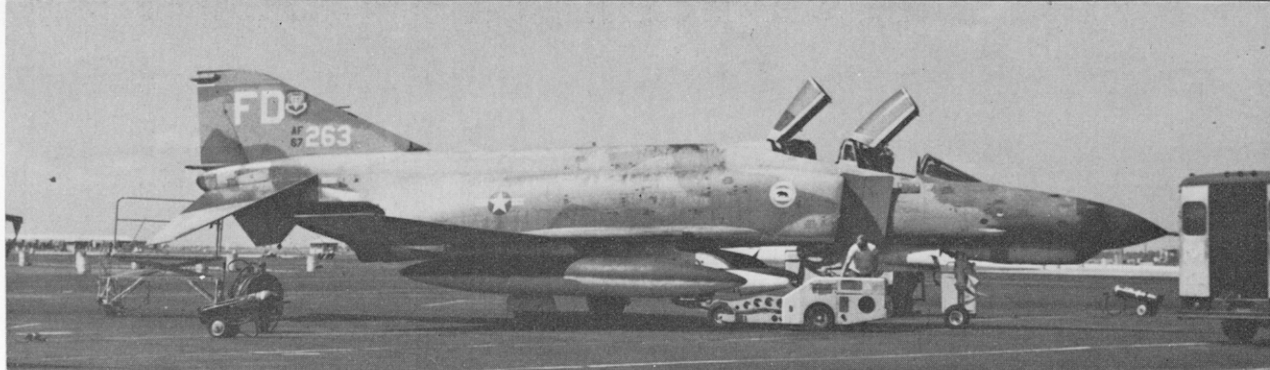
Above: F-4B (152279) of VMFAT-201 photographed at MCAS Cherry Point. (D. A. Kasulka)



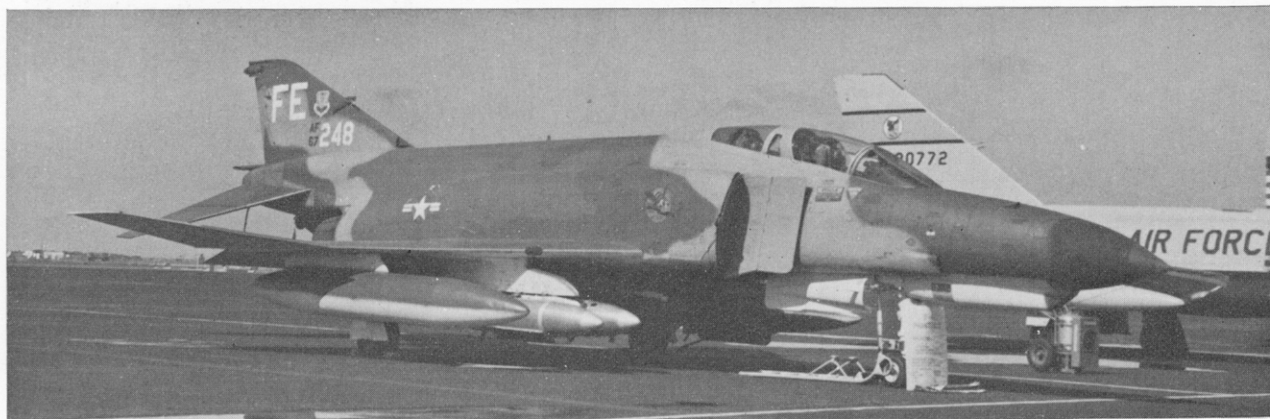
Above: F-4J (153829) of Marine Fighter Attack Training Squadron 201, one of two training squadrons of the Marine Corps flying Phantoms. (Lionel Paul via P. Mancus)

Below: F-4E, 45 TFS, photographed at Andrews AFB in January 1969. (J. G. Handelman)

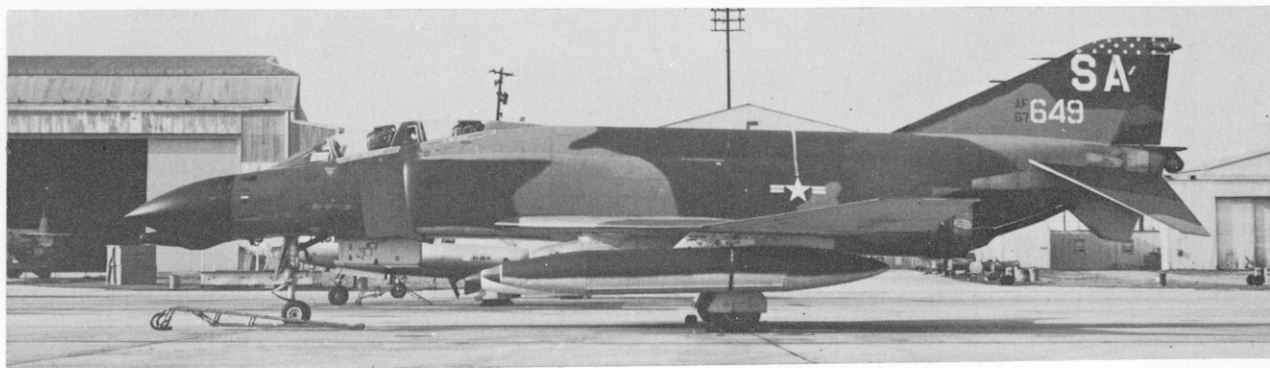




Above: Based at MacDill AFB, Florida this F-4E belongs to the 46 TFS, 1 TFW. Note faded camouflage. (Buchanan/D. W. Menard via R. J. Francillon)

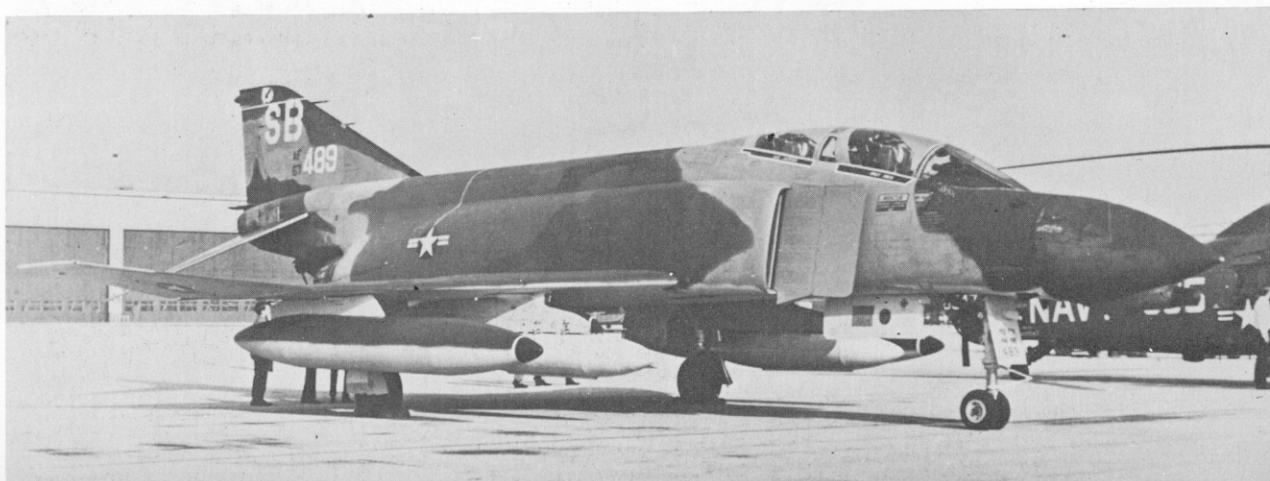


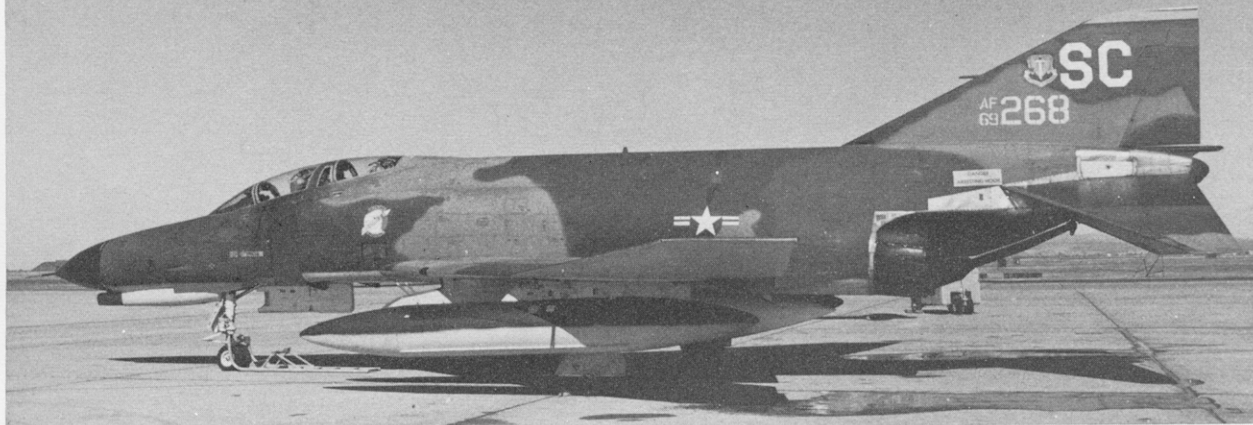
Above: F-4E of the 47 TFS, 1 TFW also based at MacDill AFB; note squadron insignia on air intake. (Buchanan/D. W. Menard via R. J. Francillon)



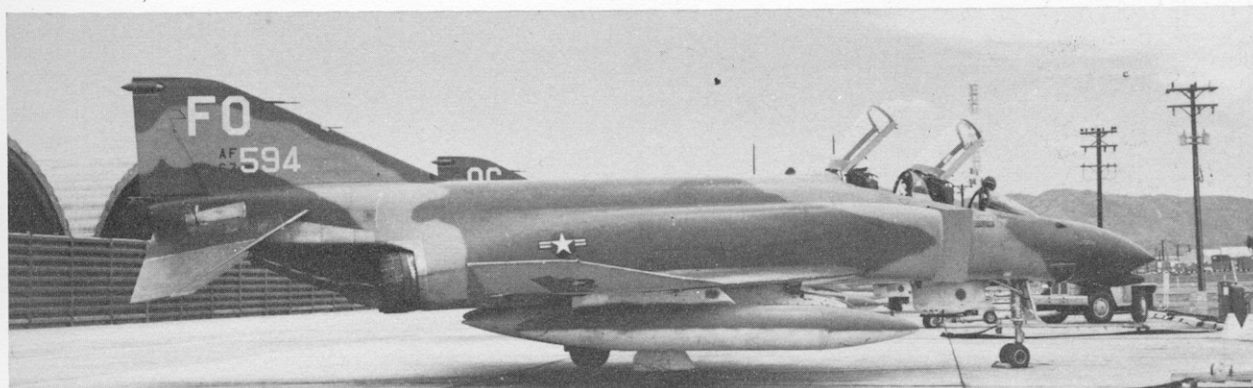
Above: F-4D of the 334 TFS, 4 TFW at Seymour Johnson AFB. (R. Besecker/D. W. Menard via R. J. Francillon)

Below: F-4D of the 335 TFS, 4 TFW photographed at Willow Run, Mich., in September 1968. Green tip to fin, canopy rails and nose of tanks. (F. Roos)



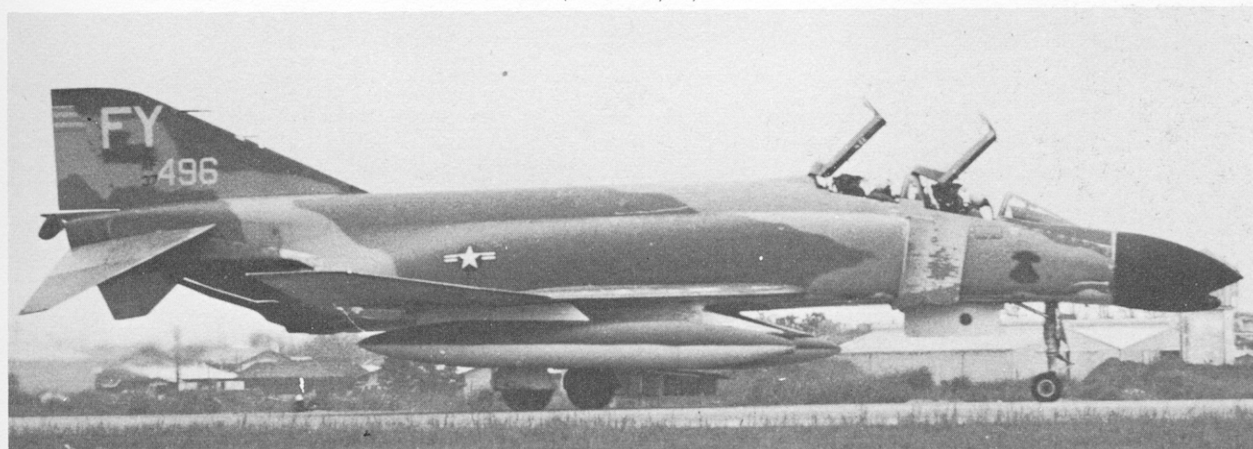


Above: F-4E of the 336 TFS, 4 TFW, Seymour Johnson AFB. Note TAC insignia on fin and squadron insignia on air intake. (P. Mancus via R. J. Francillon)

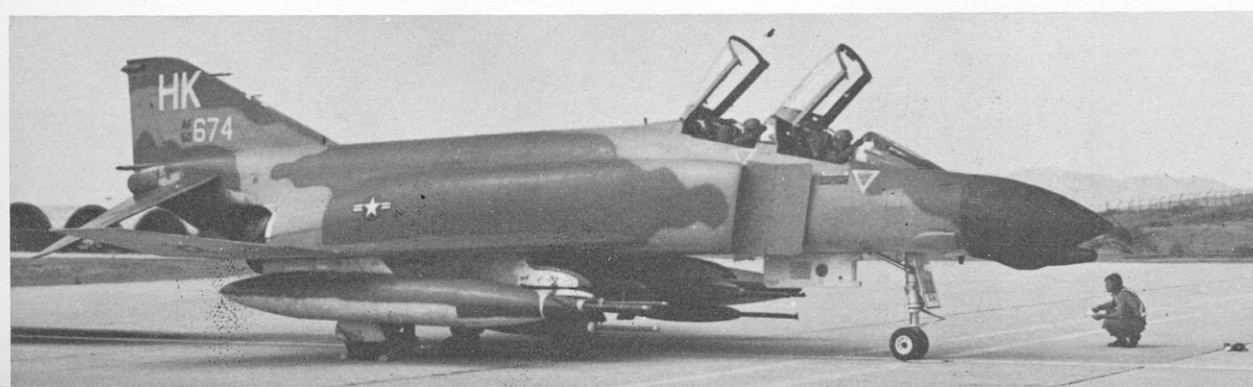


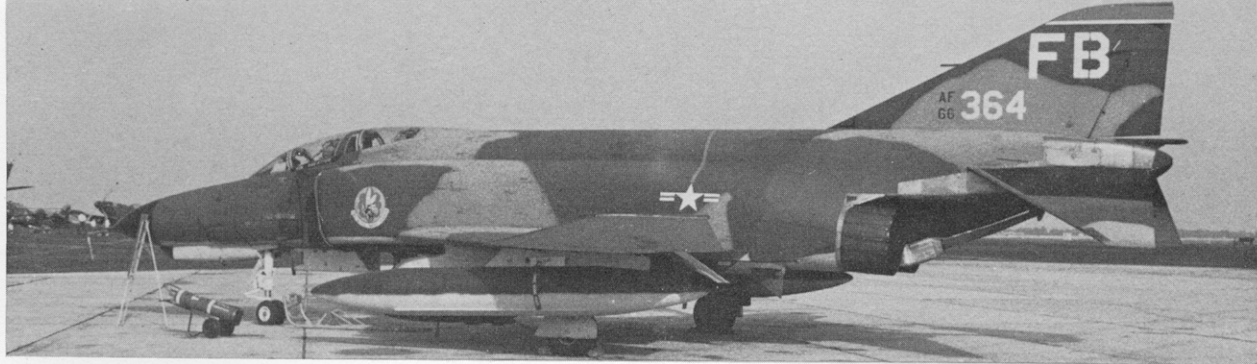
Above: Operating from Ubon RTAFB, Thailand, this F-4D belongs to the 435 TFS, 8 TFW. (N. Taylor/D. W. Menard via R. J. Francillon)

Below: F-4D of the 555 TFS, 8 TFW also based at Ubon, Thailand. (F. C. Dickey Jr.)



Below: F-4D of the 480 TFS, 12 TFW at Holloman AFB, New Mexico. This squadron has since been de-activated. (N. Taylor/D. W. Menard via R. J. Francillon)

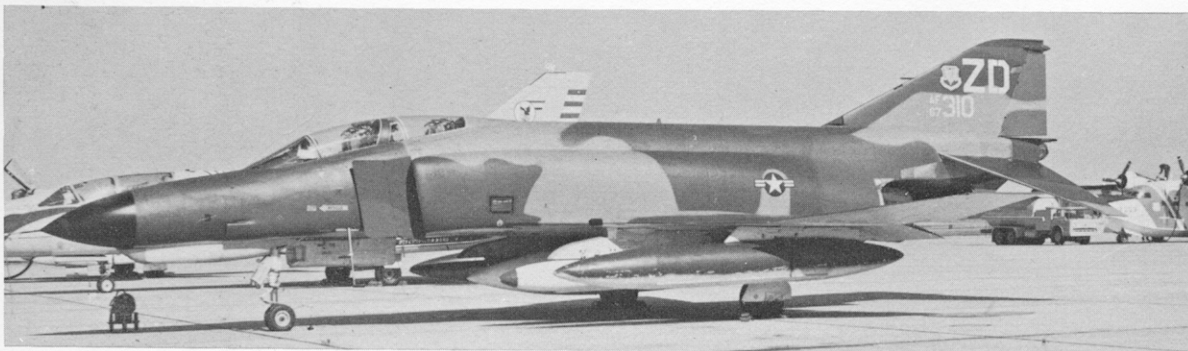




Above: F-4E bearing the Vespa Maculata insignia of the 43 TFS, 15 TFW. (Buchanan/D. W. Menard via R. J. Francillon)

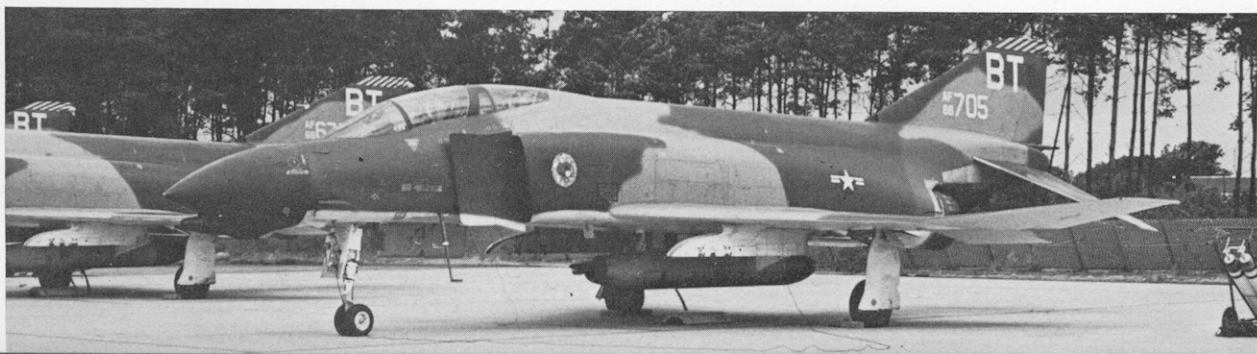


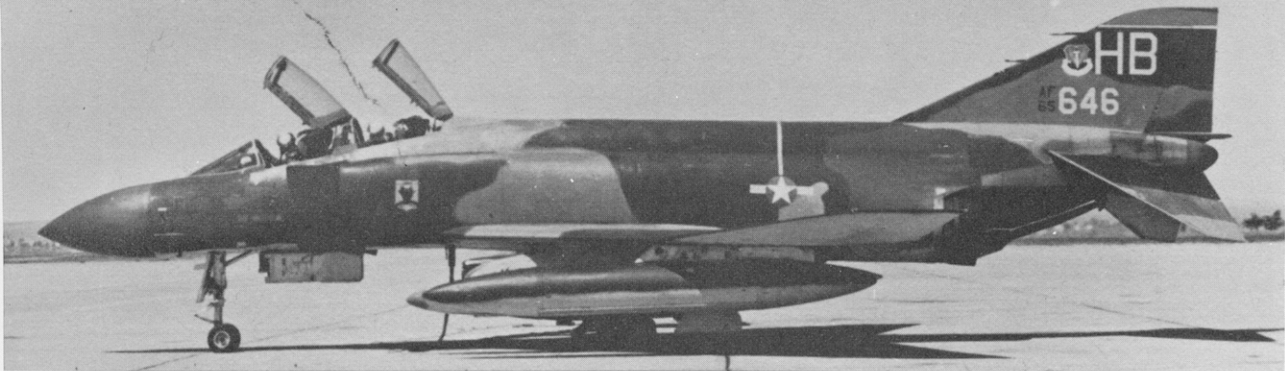
Above: F-4D of the 478 TFS, 31 TFW displaying TAC insignia on fin, 31 TFW insignia on air intake and squadron insignia on port intake. (F. Roos)



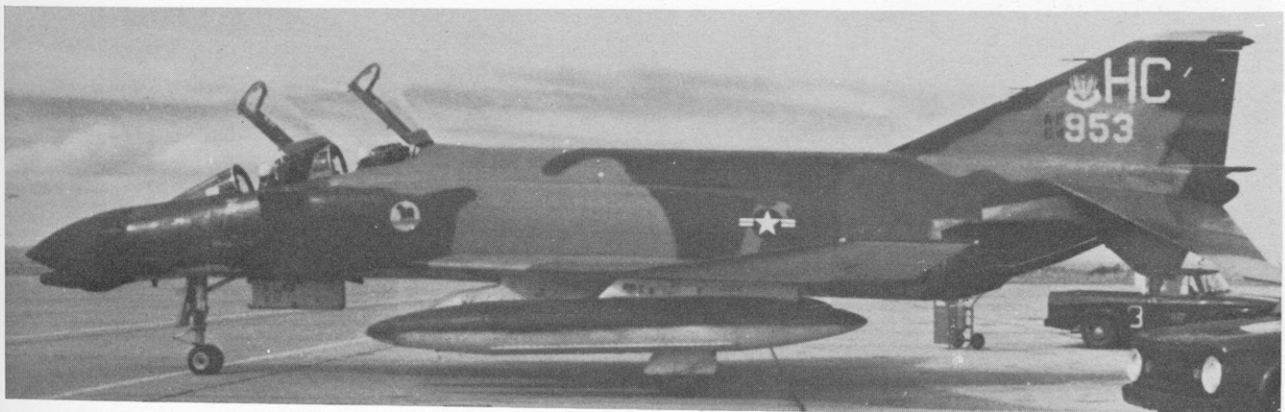
Above: F-4D of the 436 TFS, 31 TFW, TAC insignia on fin. (J. G. Handelman)

Below: F-4D carrying a SUU-16/A gun pod on the centerline pylon belongs to the 53 TFS, 36 TFW, based at Bitburg AB, West Germany. (G. Pennick/D. W. Menard via R. J. Francillon)





Above: F-4D of the 7 TFS, 49 TFW photographed at George AFB, March 1970. (D. A. Kasulka)

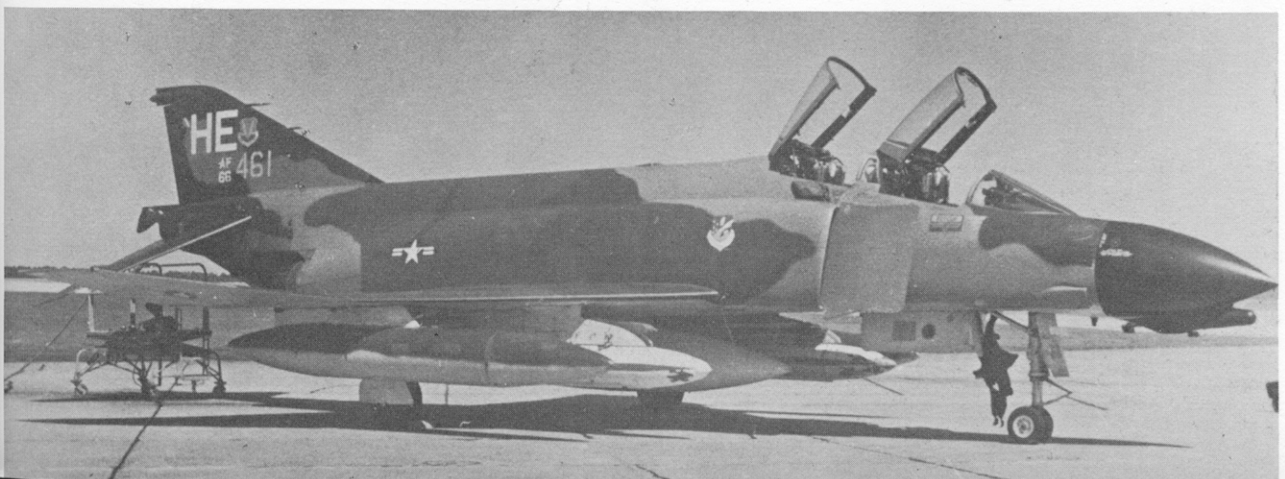


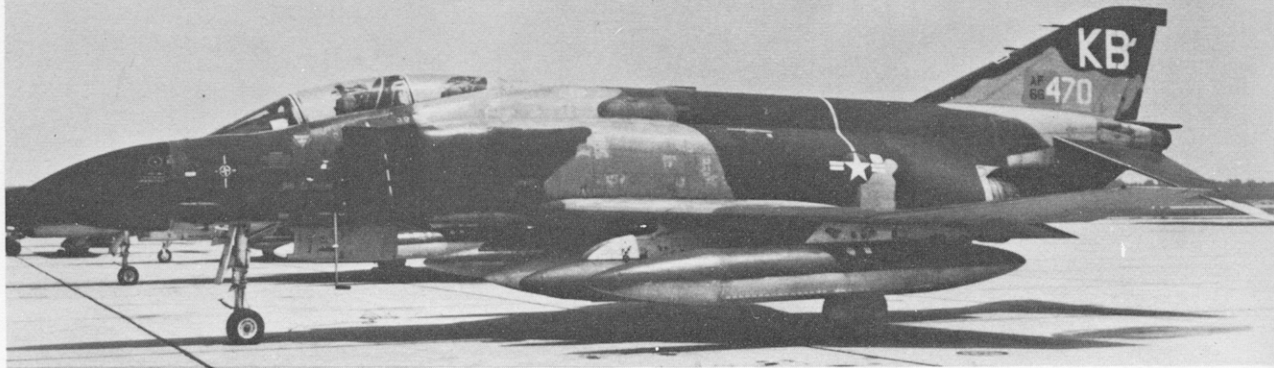
Above: Belonging to the 8 TFS, 49 TFW based at Holloman AFB, New Mexico, November 1970. (R. J. Francillon)

Below: Starboard side-view showing position of insignia. (J. G. Handelman)



Below: F-4D of the 417 TFS, 49 TFW photographed at Eglin AFB, spring 1971. (T. Brewer via F. Roos)





Above: F-4D of the 417 TFS, 50 TFW at Andrews AFB, July 1969. (D. A. Kasulka)

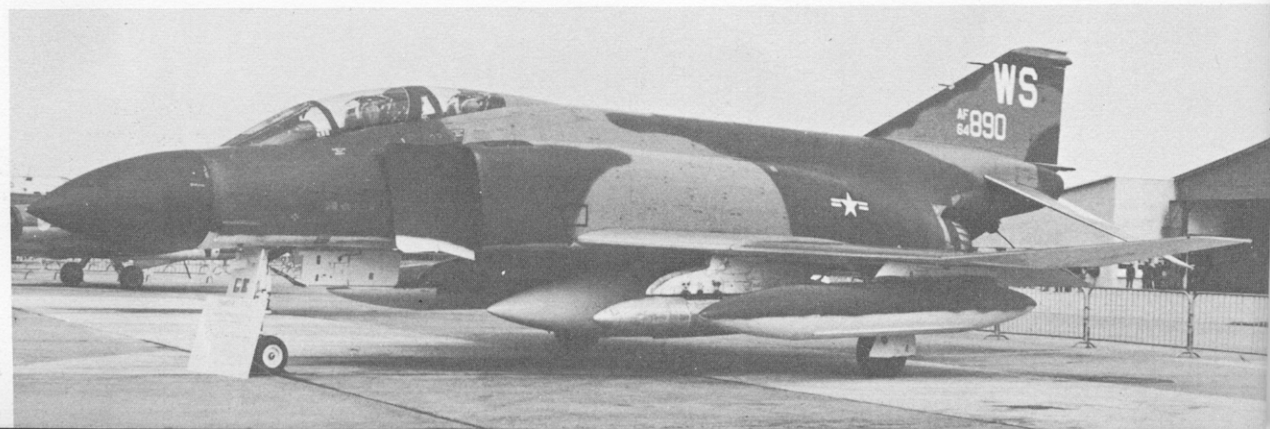


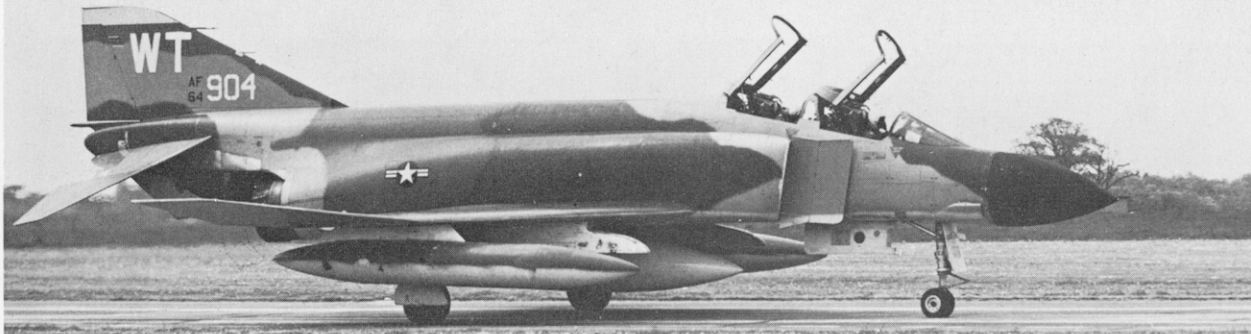
Above: F-4E, 66-318 of the 414 Fighter Weapons Squadron, 57 FWW landing at Lambert Field, St. Louis, Mo. Black and yellow checks on fin. (F. Roos)



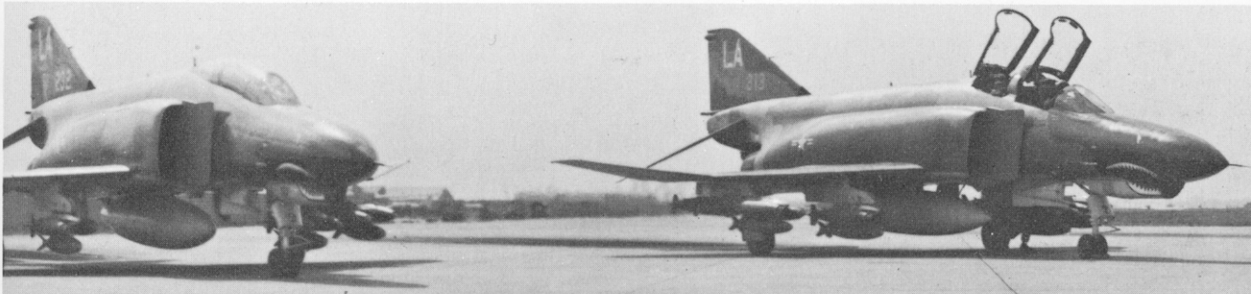
Above: RAF Woodbridge, UK based F-4D of the 78 TFS, 81 TFW. (G. Pennick/D. W. Menard via R. J. Francillon)

Below: F-4C of the 91 TFS, 81 TFW. (A. Pelletier)

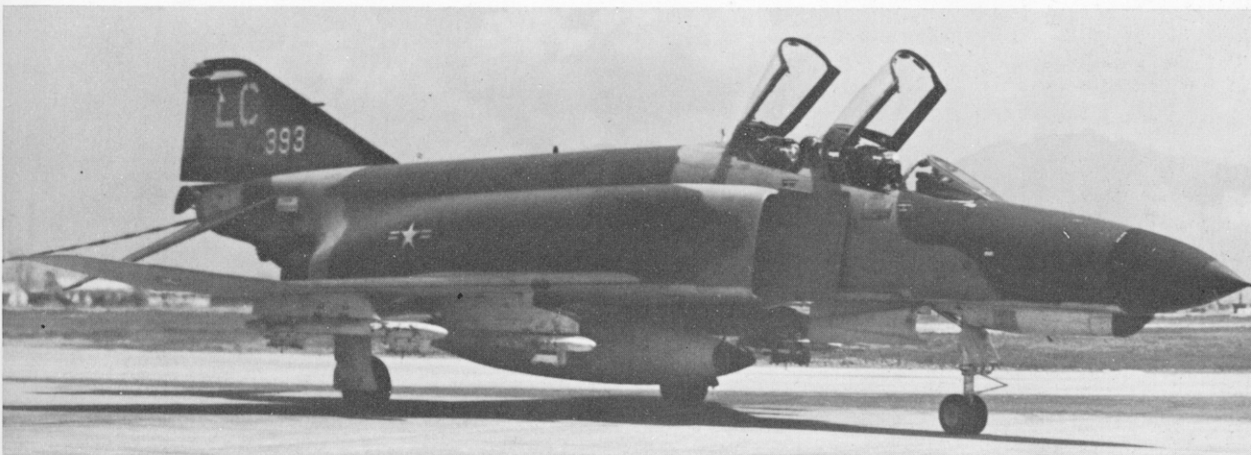




Above: Carrying three drop tanks, F-4C of the 92 TFS, 81 TFW taxis along the perimeter track at RAF Bentwaters. (G. Pennick/D. W. Menard via R. J. Francillon)

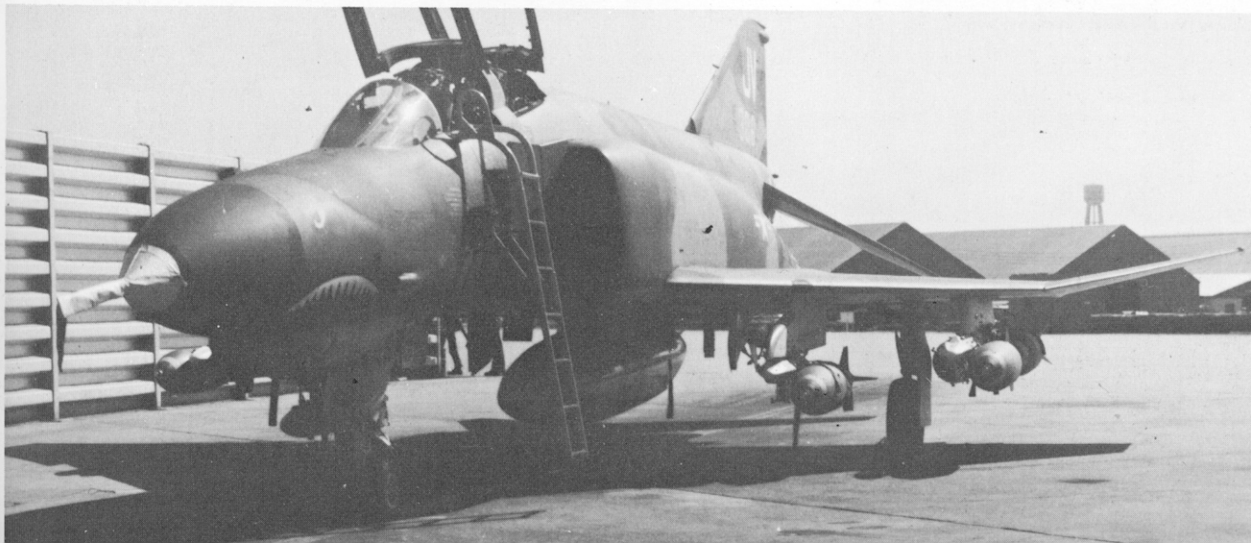


Above: A pair of F-4Es of the 4 TFS, 366 TFW, pausing at the end of the runway at Da Nang to have their weapons armed. (USAF via R. J. Francillon)



Above: An F-4E of the 421 TFS, 366 TFW landing at Da Nang with chute streaming after a ground attack mission. (USAF)

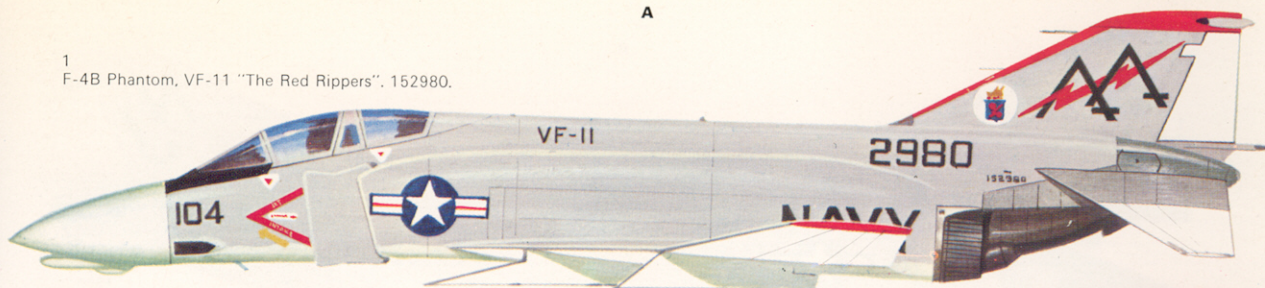
Below: An F-4E of the 469 TFS, 388 TFW, parked at Korat AB, Thailand, 22 January 1969. Note sharkmouth. (USAF via R. J. Francillon)





Sharkmouthed F-4E of the 469 TFS, 388 TFW with "calling cards" intended for "Victor Charlie" displaying the upper surface camouflage pattern. (USAF)

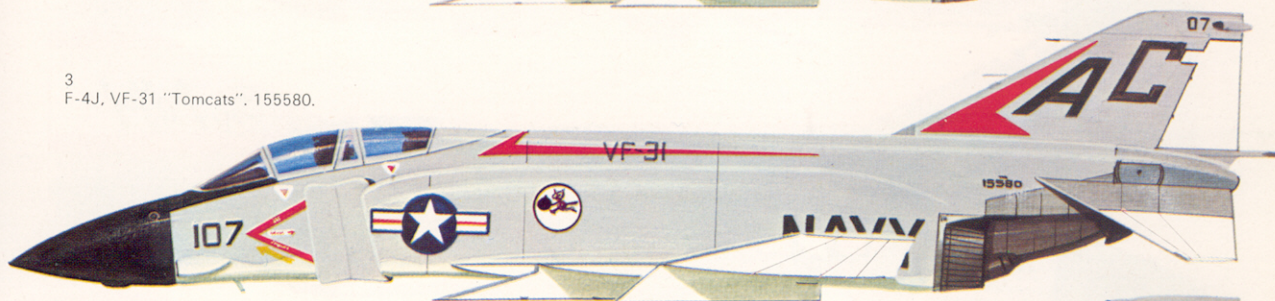
1
F-4B Phantom, VF-11 "The Red Rippers". 152980.



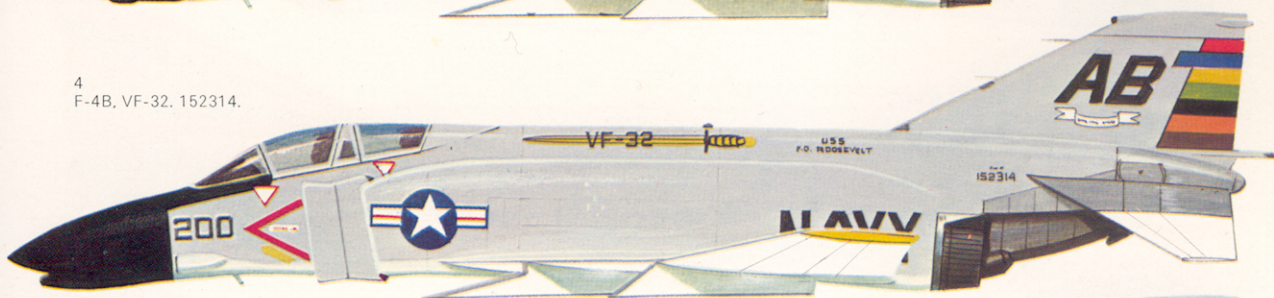
2
F-4B, VF-11 "The Red Rippers". 151469.



3
F-4J, VF-31 "Tomcats". 155580.



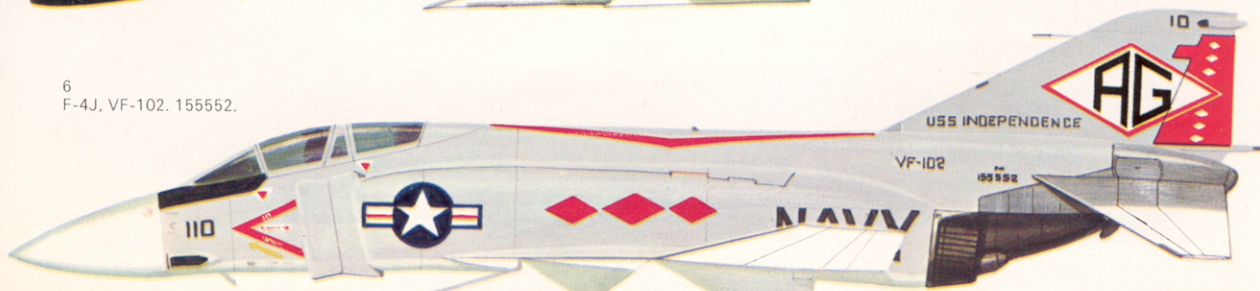
4
F-4B, VF-32. 152314.



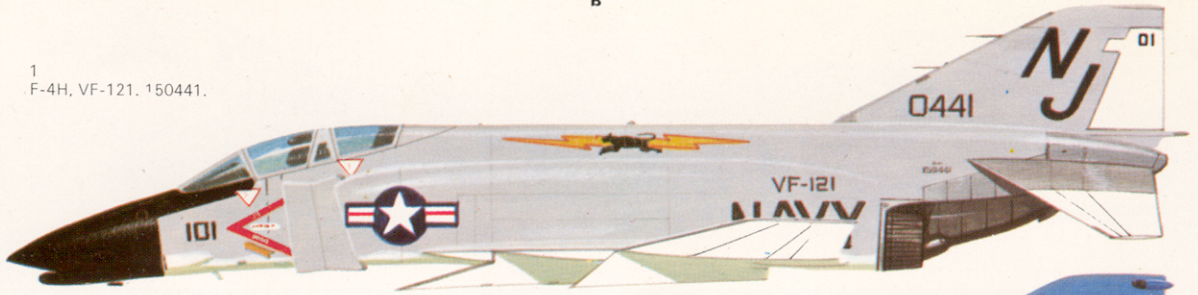
5
F-4H, VF-41. 149433.



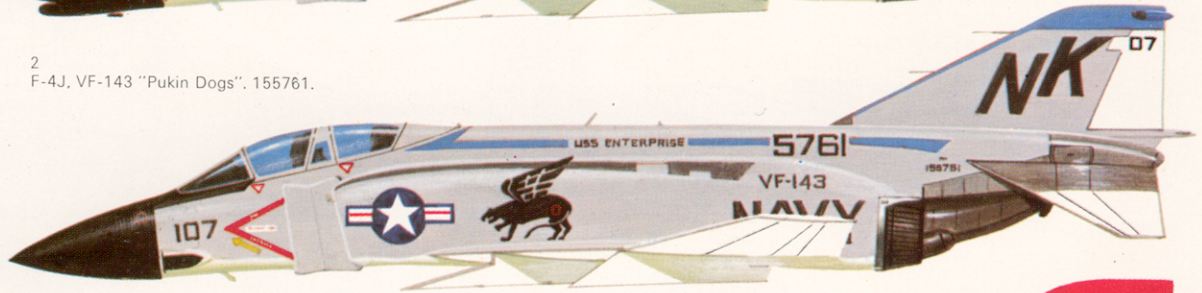
6
F-4J, VF-102. 155552.



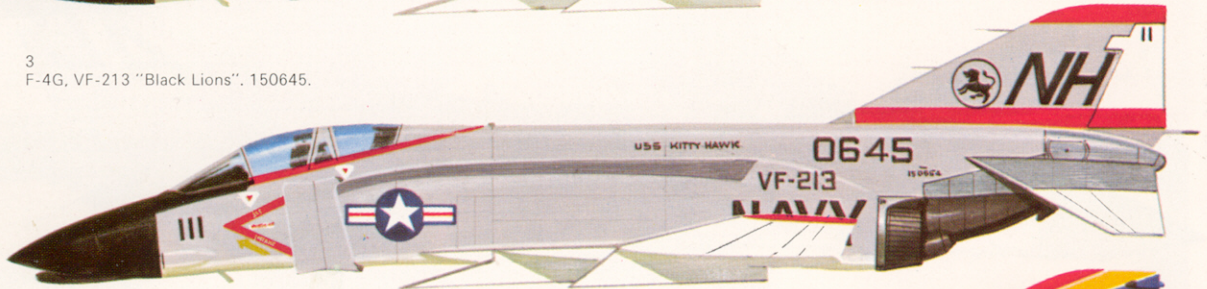
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F-4H, VF-121. 150441.



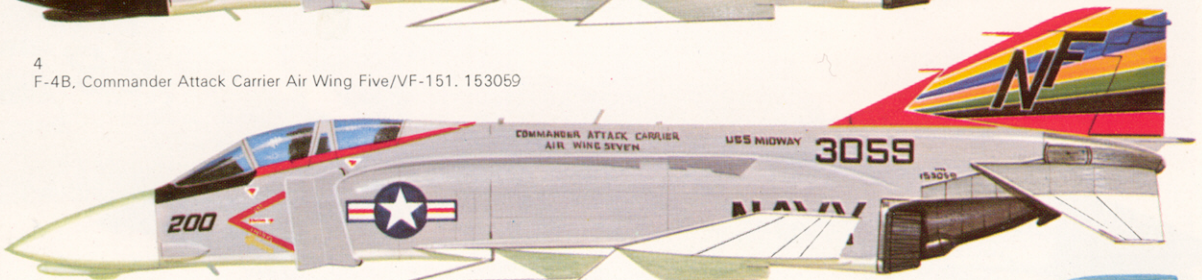
2
F-4J, VF-143 "Pukin Dogs". 155761.



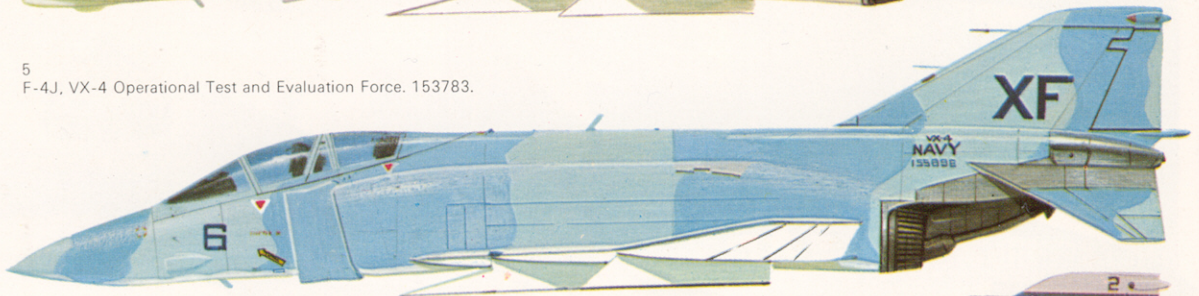
3
F-4G, VF-213 "Black Lions". 150645.



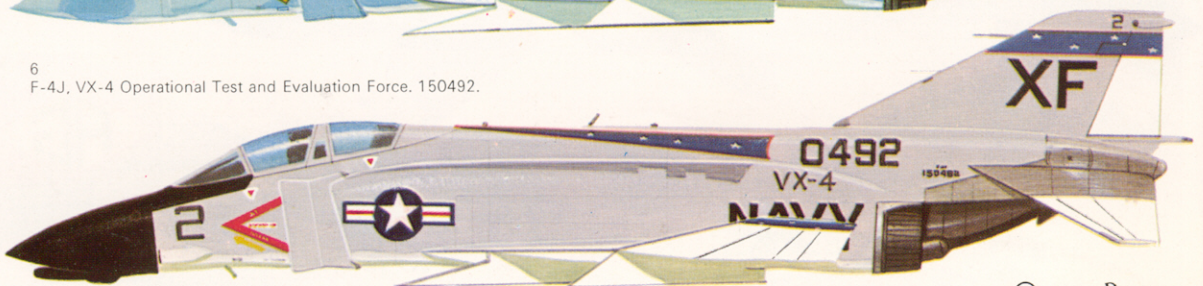
4
F-4B, Commander Attack Carrier Air Wing Five/VF-151. 153059



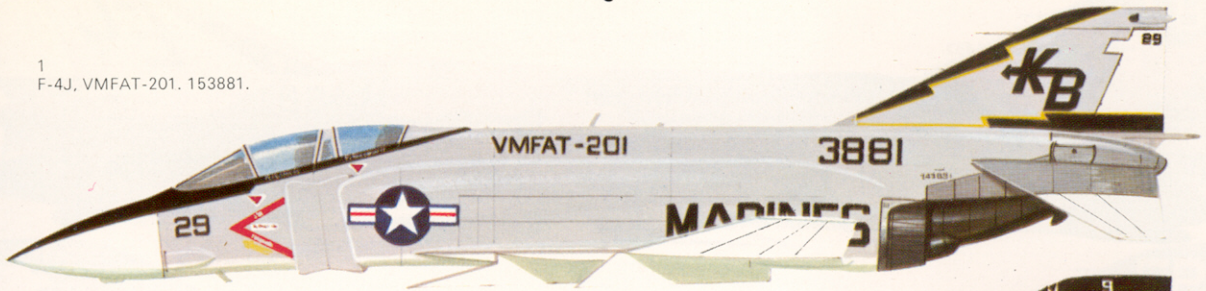
5
F-4J, VX-4 Operational Test and Evaluation Force. 153783.



6
F-4J, VX-4 Operational Test and Evaluation Force. 150492.



1
F-4J, VMFAT-201. 153881.



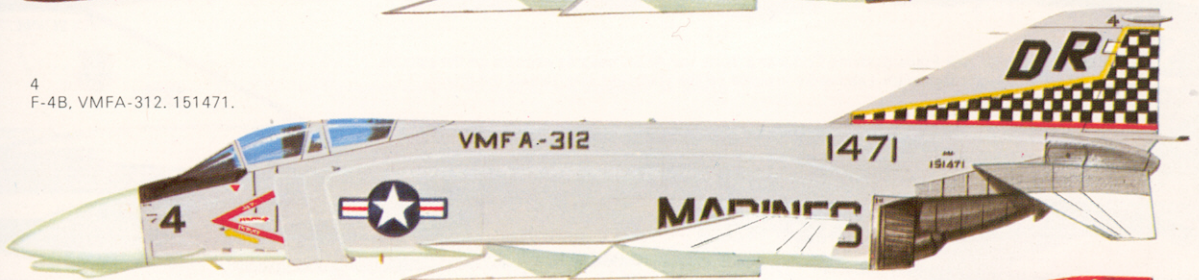
2
F-4B, VMFA-251. 155504.



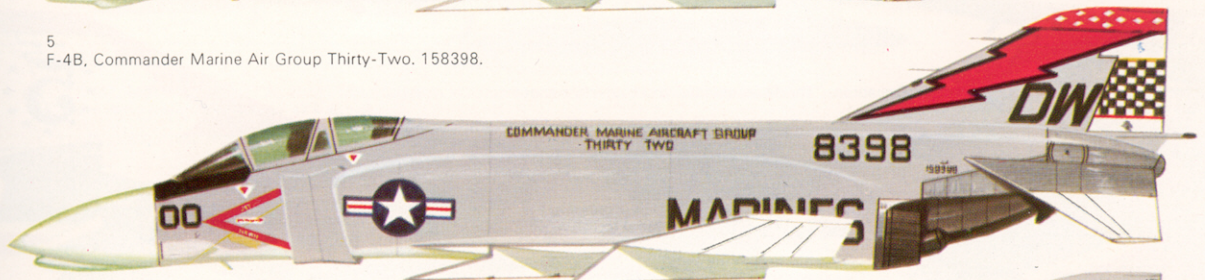
3
F-4B, VMFA-312. 148389.



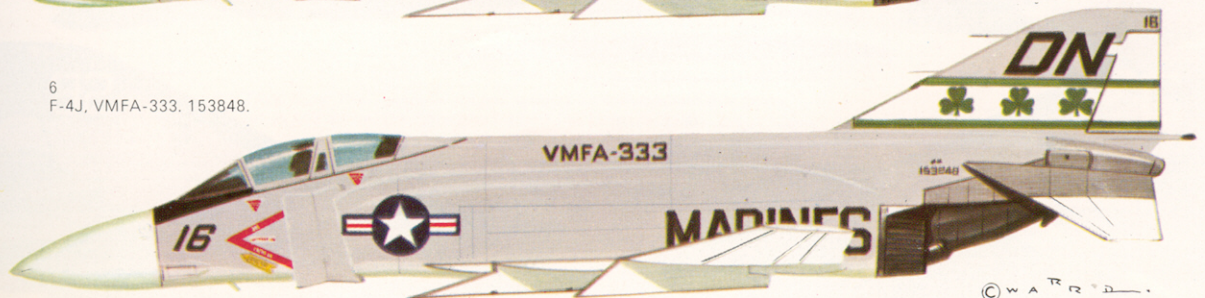
4
F-4B, VMFA-312. 151471.



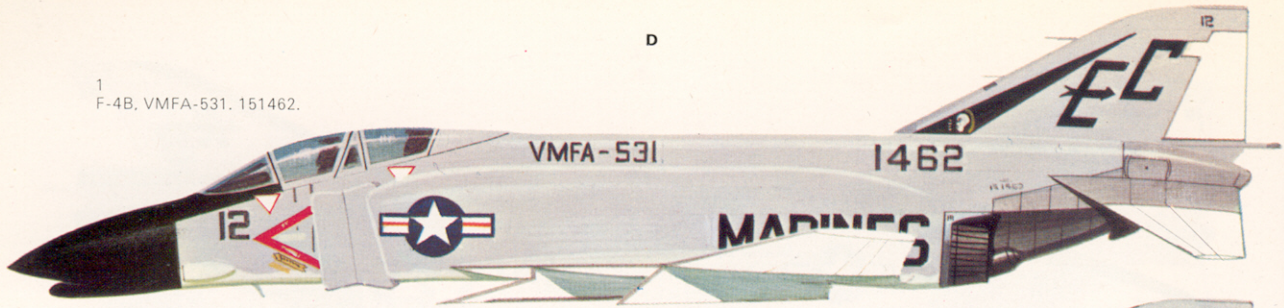
5
F-4B, Commander Marine Air Group Thirty-Two. 158398.



6
F-4J, VMFA-333. 153848.



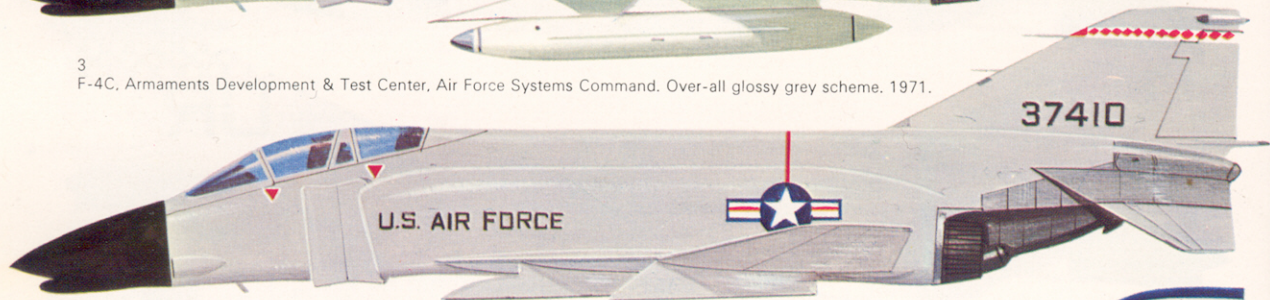
1
F-4B, VMFA-531. 151462.



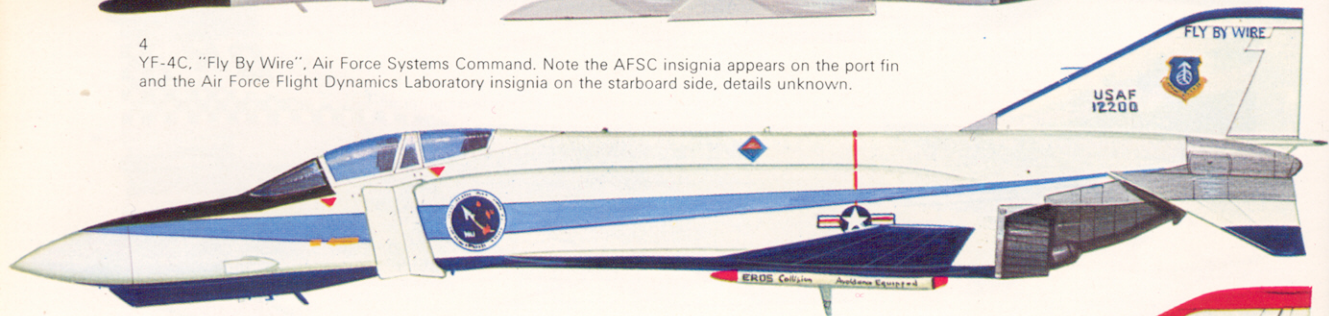
2
F-4C, Eglin AFB, Florida, November 1964. An early delivery. Note TAC insignia with yellow flash thinly outlined red.



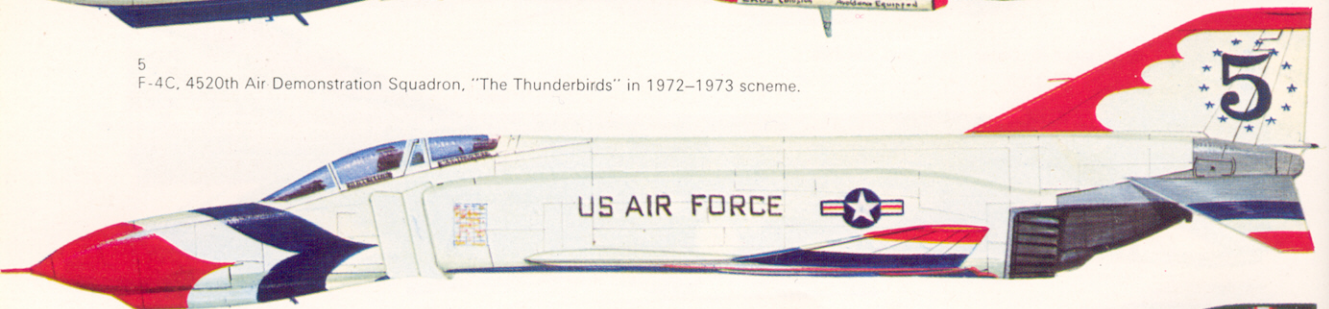
3
F-4C, Armaments Development & Test Center, Air Force Systems Command. Over-all glossy grey scheme. 1971.



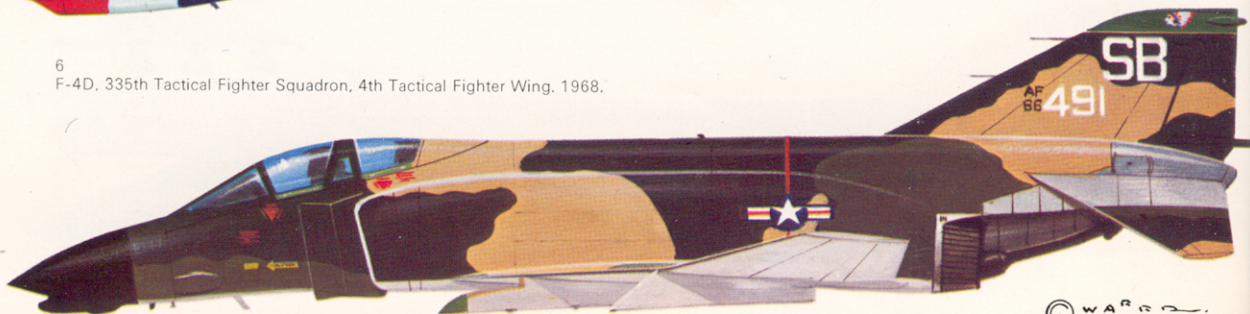
4
YF-4C, "Fly By Wire", Air Force Systems Command. Note the AFSC insignia appears on the port fin and the Air Force Flight Dynamics Laboratory insignia on the starboard side, details unknown.



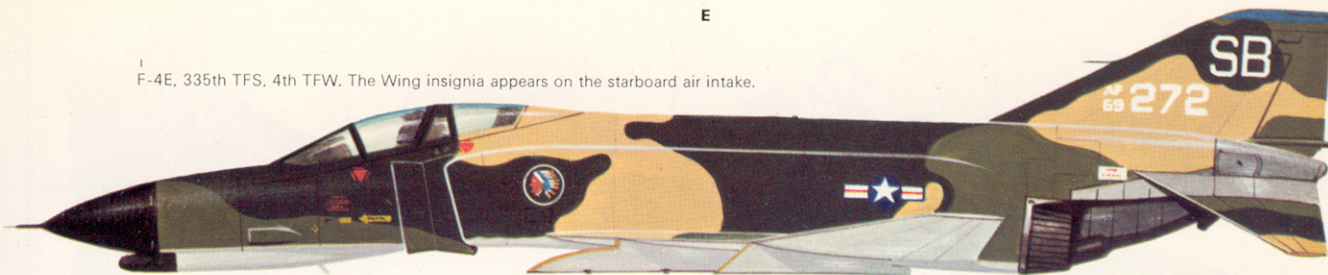
5
F-4C, 4520th Air Demonstration Squadron, "The Thunderbirds" in 1972-1973 scheme.



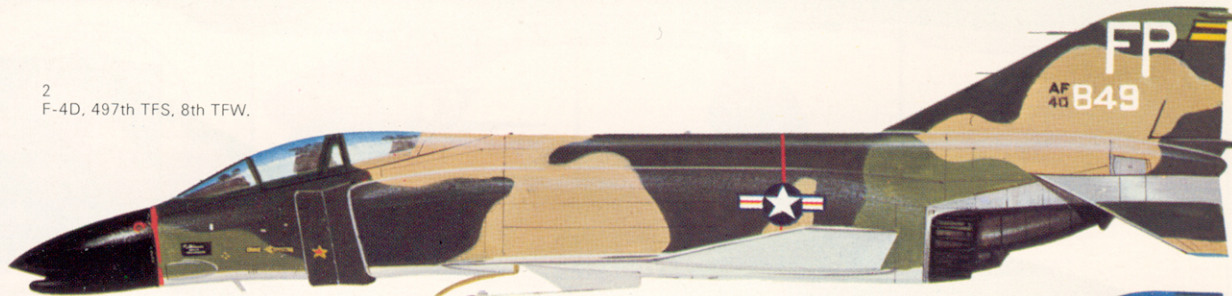
6
F-4D, 335th Tactical Fighter Squadron, 4th Tactical Fighter Wing, 1968.



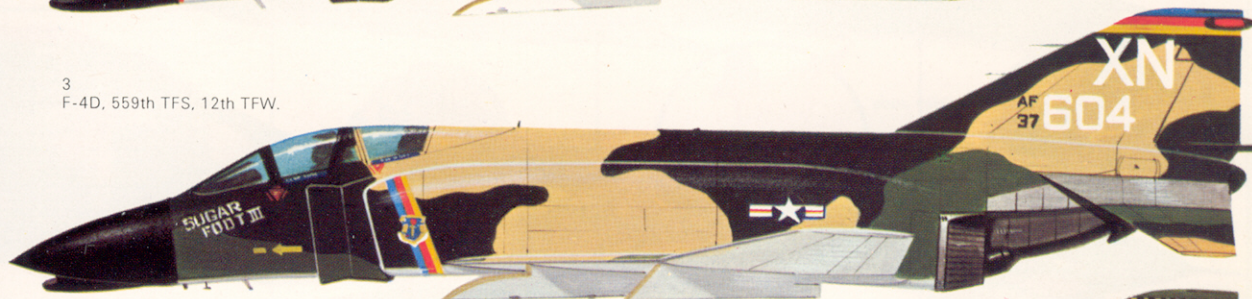
1
F-4E, 335th TFS, 4th TFW. The Wing insignia appears on the starboard air intake.



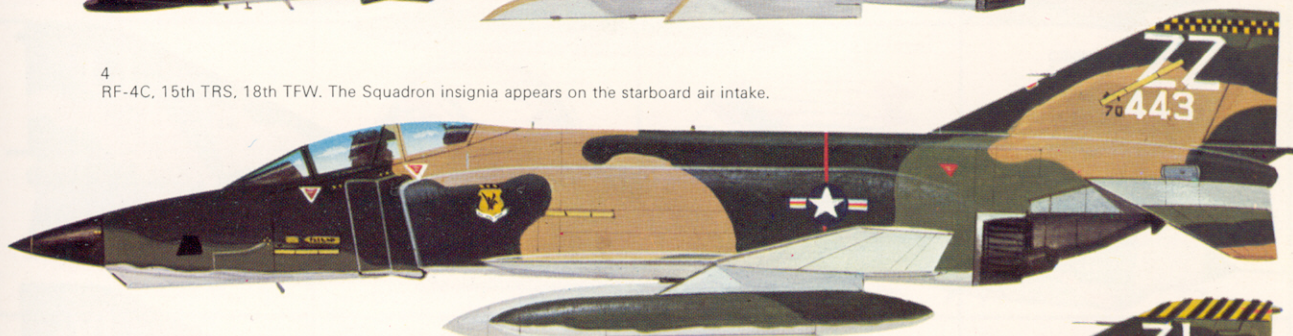
2
F-4D, 497th TFS, 8th TFW.



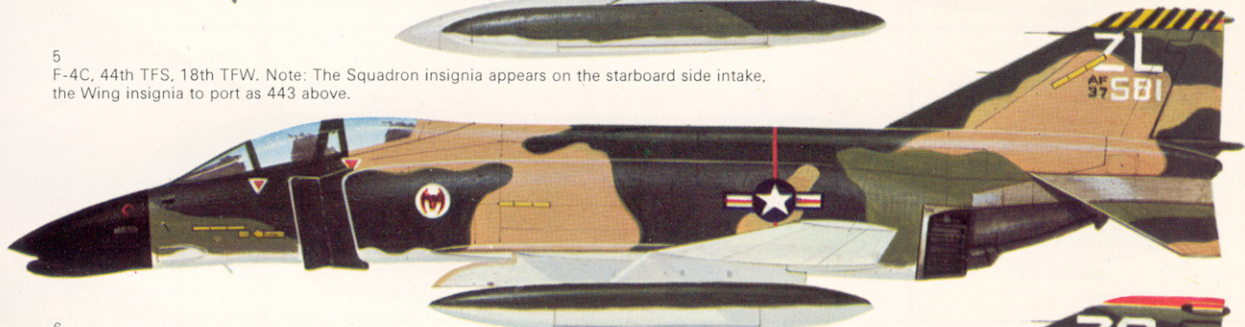
3
F-4D, 559th TFS, 12th TFW.



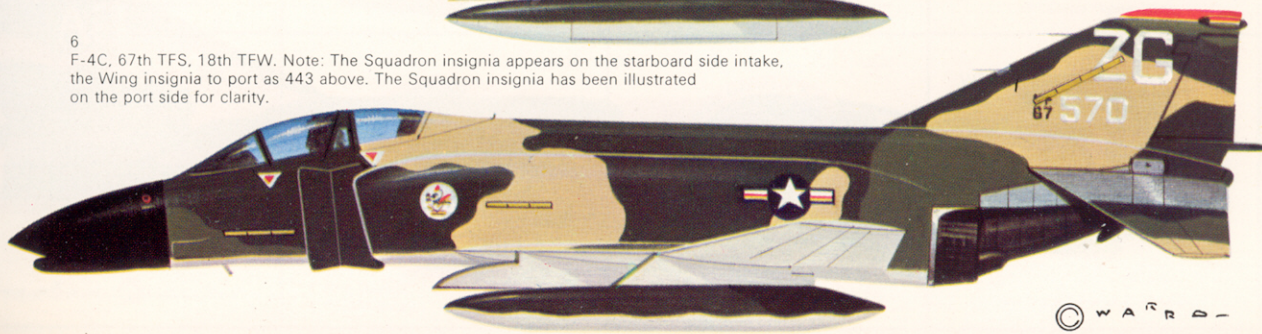
4
RF-4C, 15th TRS, 18th TFW. The Squadron insignia appears on the starboard air intake.



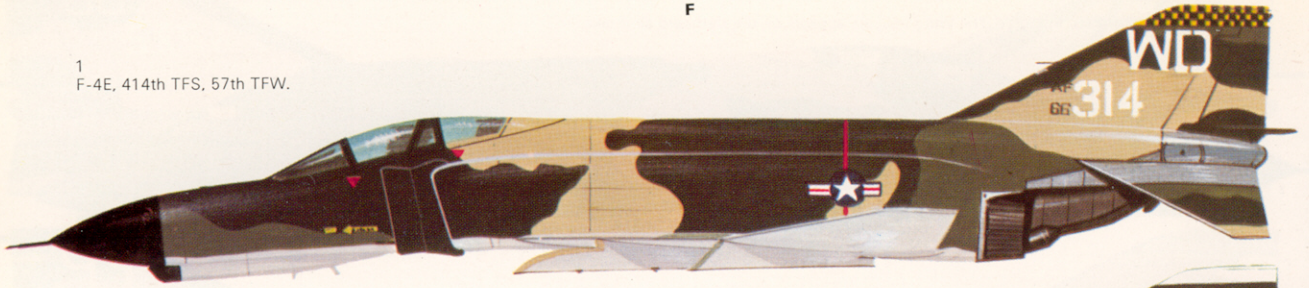
5
F-4C, 44th TFS, 18th TFW. Note: The Squadron insignia appears on the starboard side intake, the Wing insignia to port as 443 above.



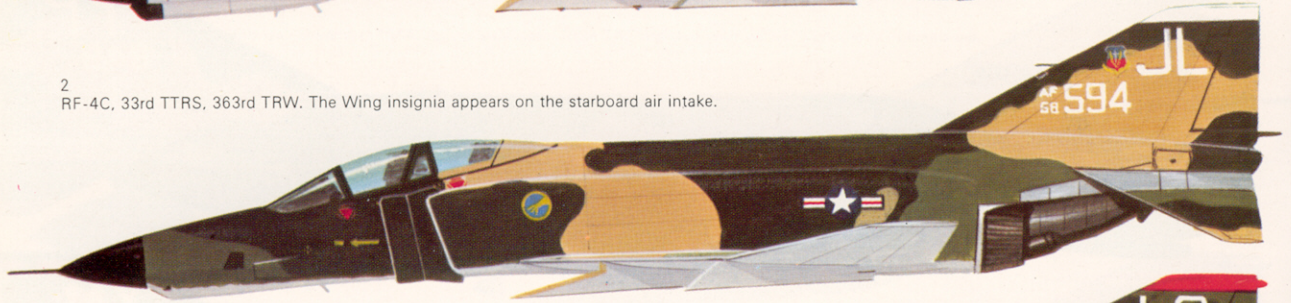
6
F-4C, 67th TFS, 18th TFW. Note: The Squadron insignia appears on the starboard side intake, the Wing insignia to port as 443 above. The Squadron insignia has been illustrated on the port side for clarity.



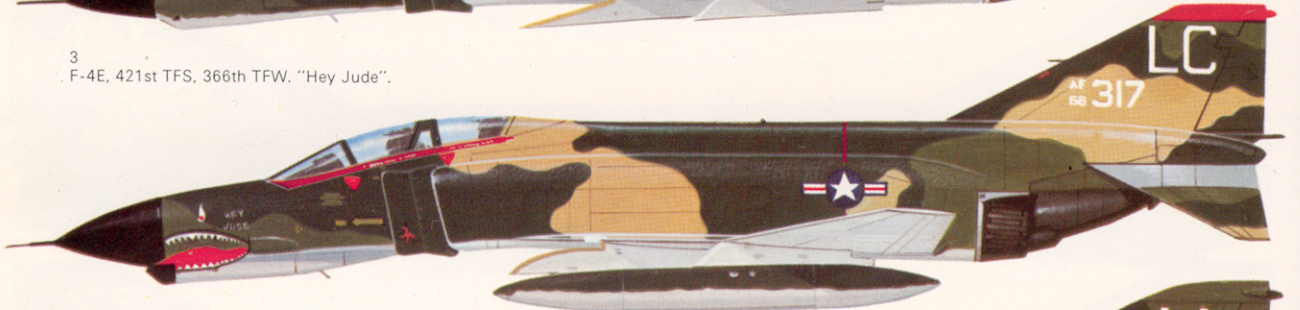
1
F-4E, 414th TFS, 57th TFW.



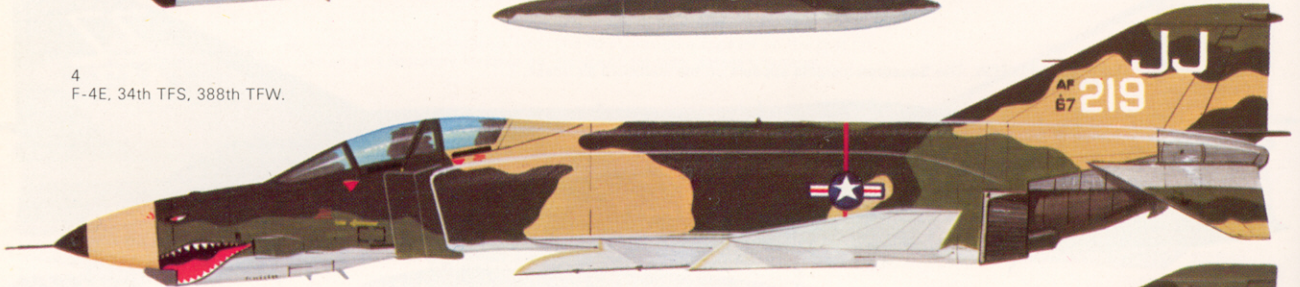
2
RF-4C, 33rd TTRS, 363rd TRW. The Wing insignia appears on the starboard air intake.



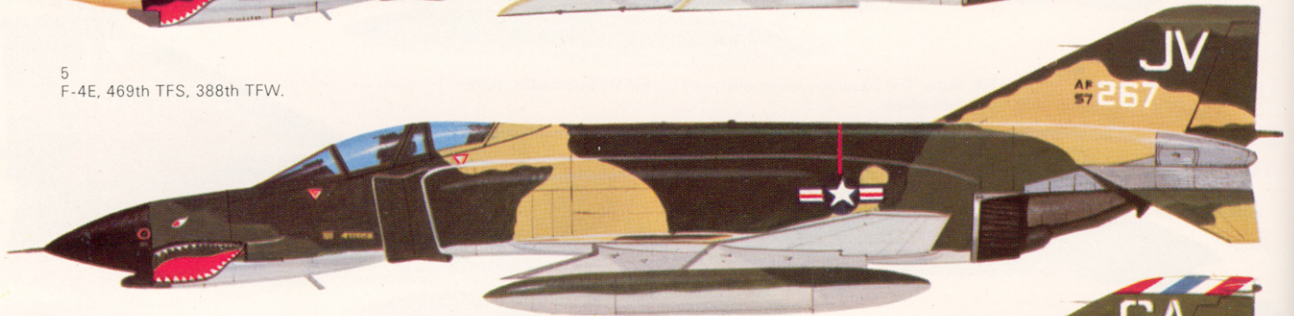
3
F-4E, 421st TFS, 366th TFW. "Hey Jude".



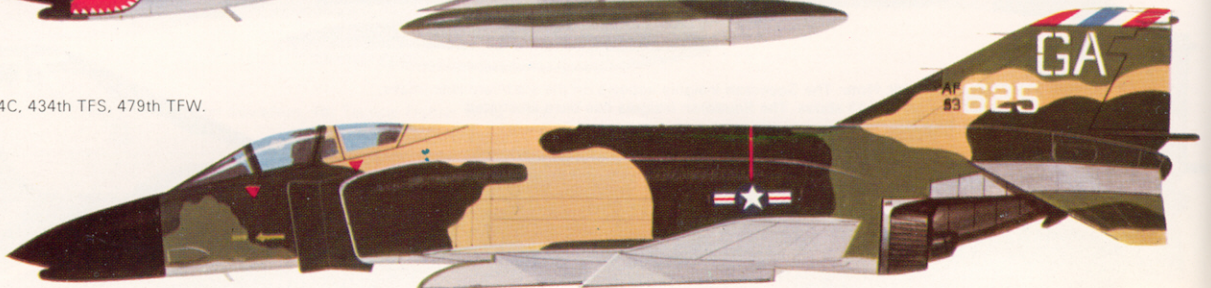
4
F-4E, 34th TFS, 388th TFW.



5
F-4E, 469th TFS, 388th TFW.



6
F-4C, 434th TFS, 479th TFW.



USN



VF-11

USN



VF-21

USN



VF-31

USN



VF-92

USN



VF-161

USN



Naval Missile Center

USMC



VMFA-115

USMC



VMFA-232

USMC



VMFA-251

USMC



VMFA-512

USMC



CMCJ-1

USAF



Tactical Air Command

USAF



4th Tactical Fighter Wing

USAF



335th Tactical Fighter Squadron

USAF



335th Tactical Fighter Squadron

USAF



18th Tactical Fighter Wing

USAF



497th Tactical Fighter Squadron

USAF



44th Tactical Fighter Squadron

USAF



67th Tactical Fighter Squadron

USAF



12th Tactical Fighter Wing

USAF



363rd Tactical Reconnaissance Wing

USAF



33rd Tactical Reconnaissance Training Squadron

USAF



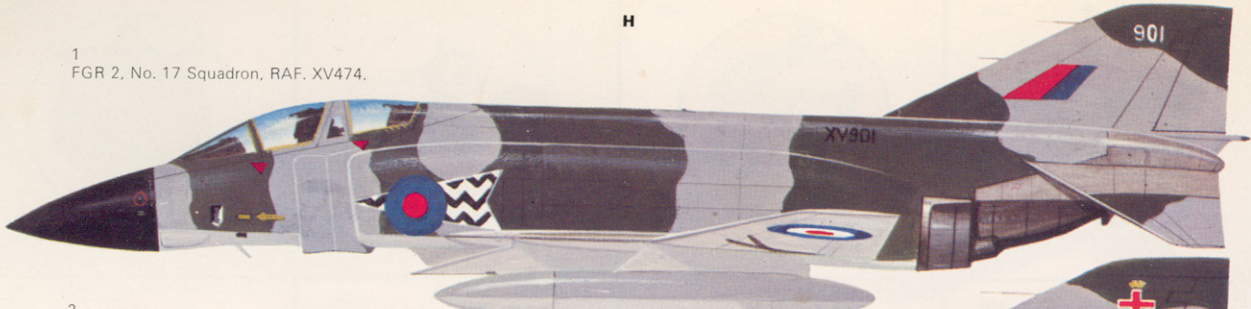
Air Force Survivable Flight Control

USAF

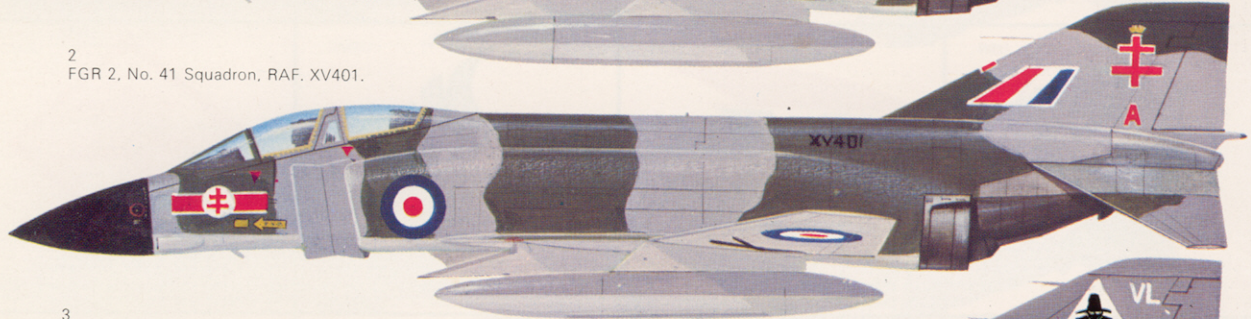


Air Force Systems Command

1
FGR 2, No. 17 Squadron, RAF, XV474.



2
FGR 2, No. 41 Squadron, RAF, XV401.



3
FG 1, No. 892 Squadron, FAA, XT859.



A No. 14 Squadron
RAF



B No. 41 Squadron
RAF



C No. 54 Squadron
RAF



D No. 6 Squadron
RAF



E No. 17 Squadron
RAF



F No. 43 Squadron
RAF



G No. 892 Squadron
FAA



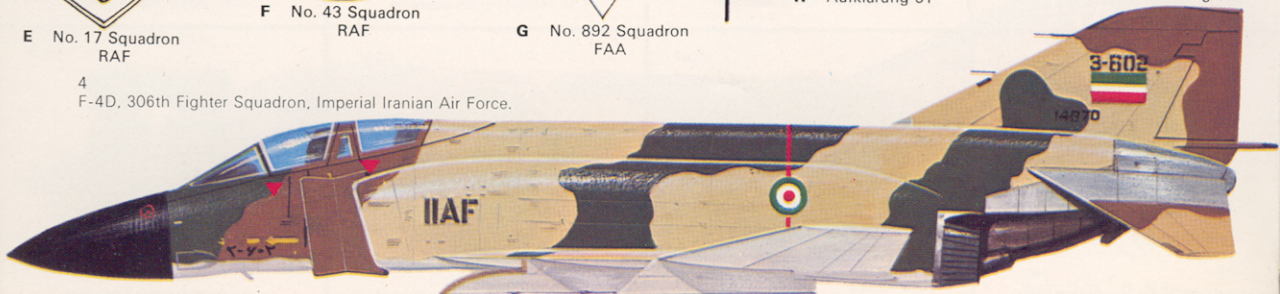
H Aufklärung 51

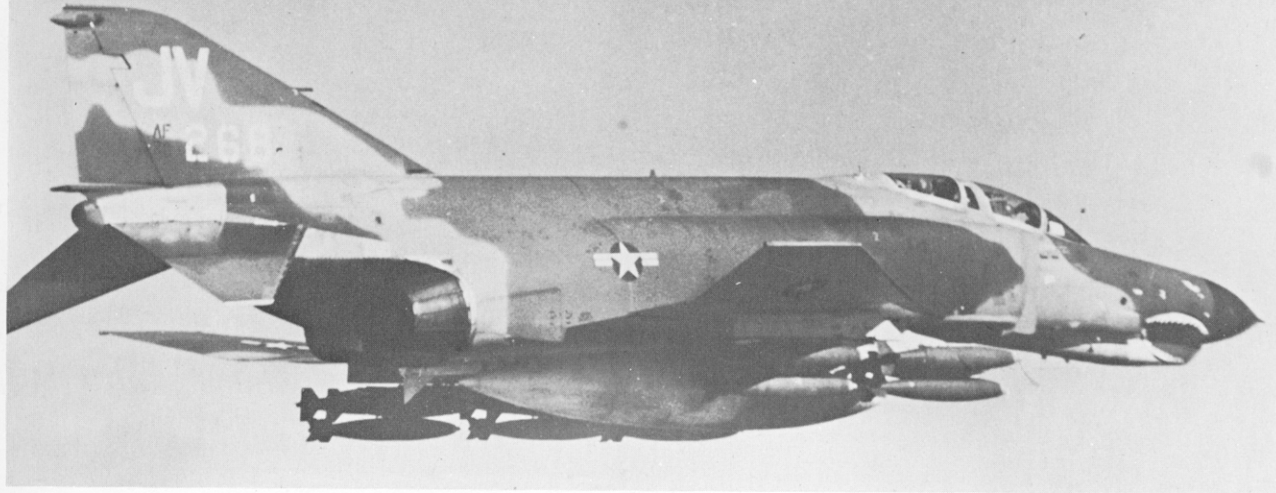


I Aufklärung 52

West German
Luftwaffe

4
F-4D, 306th Fighter Squadron, Imperial Iranian Air Force.



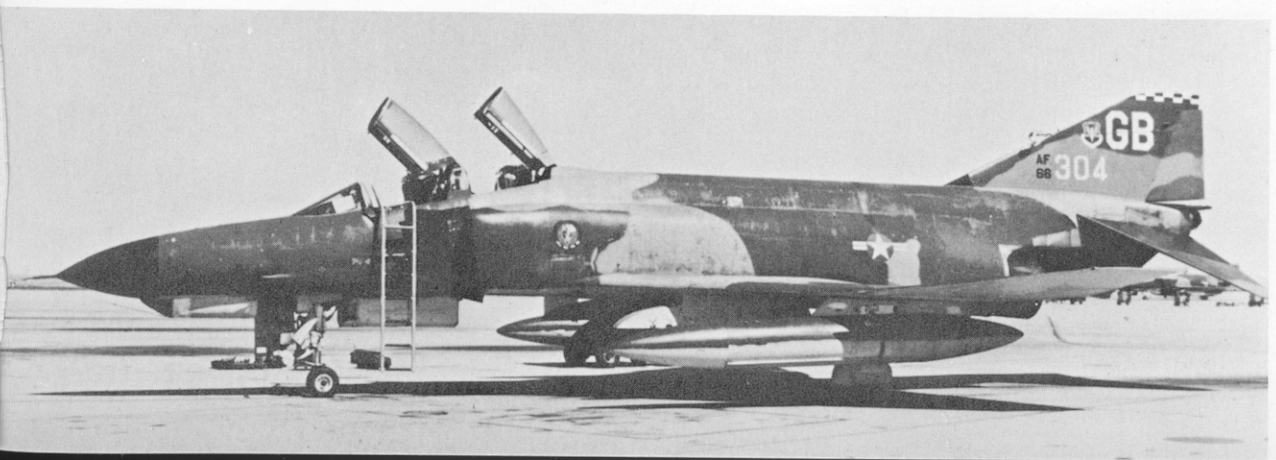


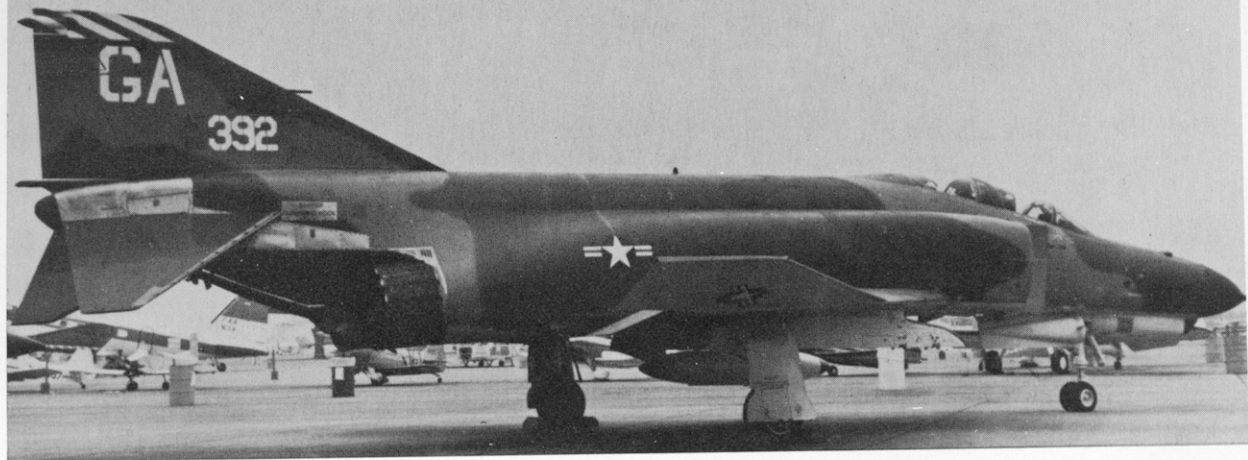
Above: F-4E of the 469 TFS, 388 TFW outward bound on a ground attack mission over North Vietnam. (USAF)

Below: Sharkmouthed Phantom of the 469 TFS in front of the control tower at Korat AB prior to a sortie against VC forces on 20 January 1970. (USAF)

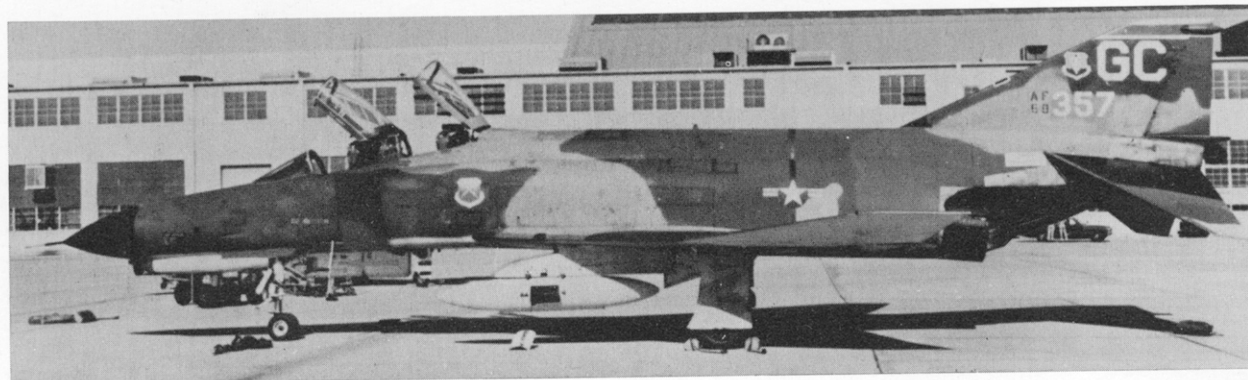


Below: F-4E of the 431 TFS, 479 TFW based at George AFB. (D. A. Kasulka)



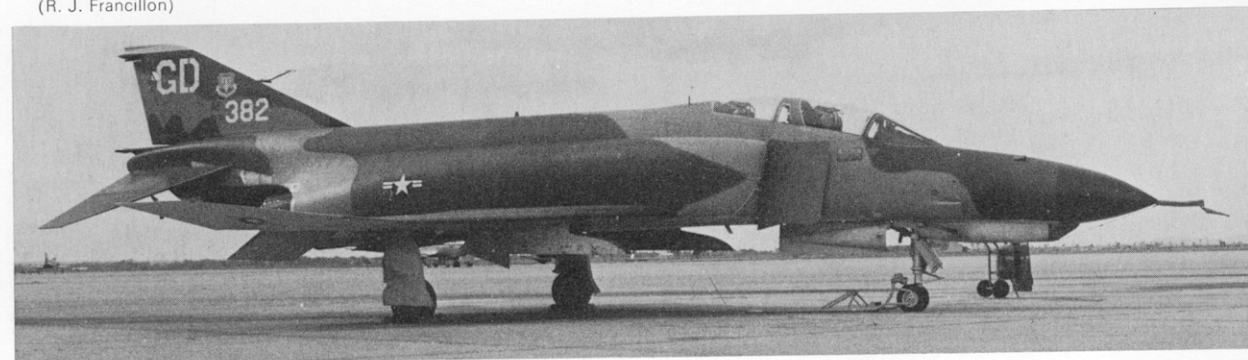


Above: F-4E of the 4535 Combat Crew Training Squadron (CCTS), 479 TFW, seen at Van Nuys AFB, May 1969. (D. A. Kasulka)



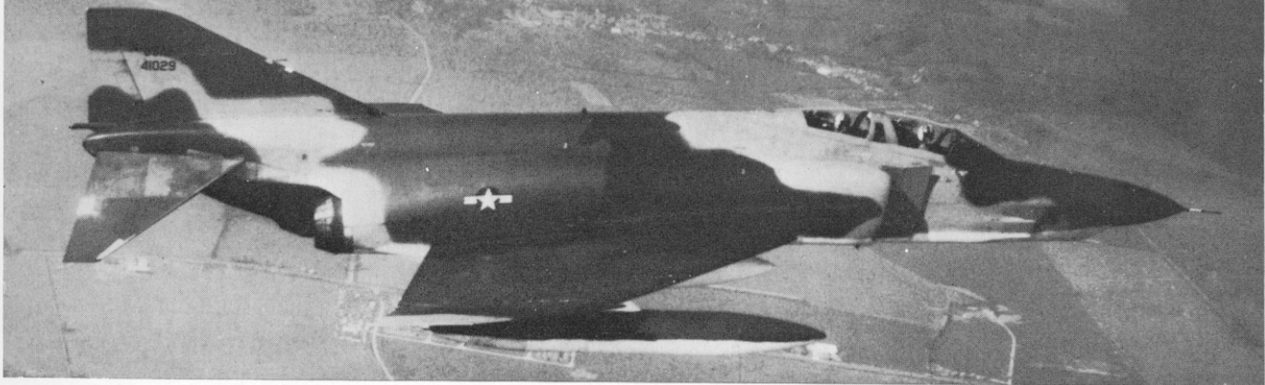
Above: F-4E of the 434 TFS, 479 TFW, the 4452 CCTS carried the same code letters.

Below: Bearing the tail code GD identifying the 476 TFS, 479 TFW, this F-4E was photographed at George AFB, California, on 6 November 1970. (R. J. Francillon)

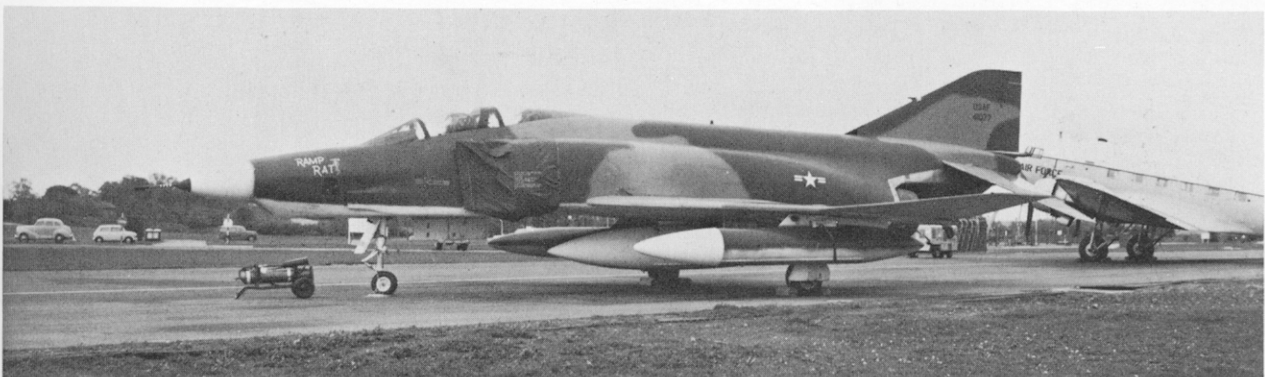


Below: With its wings folded, this F-4C of the 434 TFS, 479 TFW, shows clearly the naval ancestry of the USAF Phantoms. (R. J. Francillon)

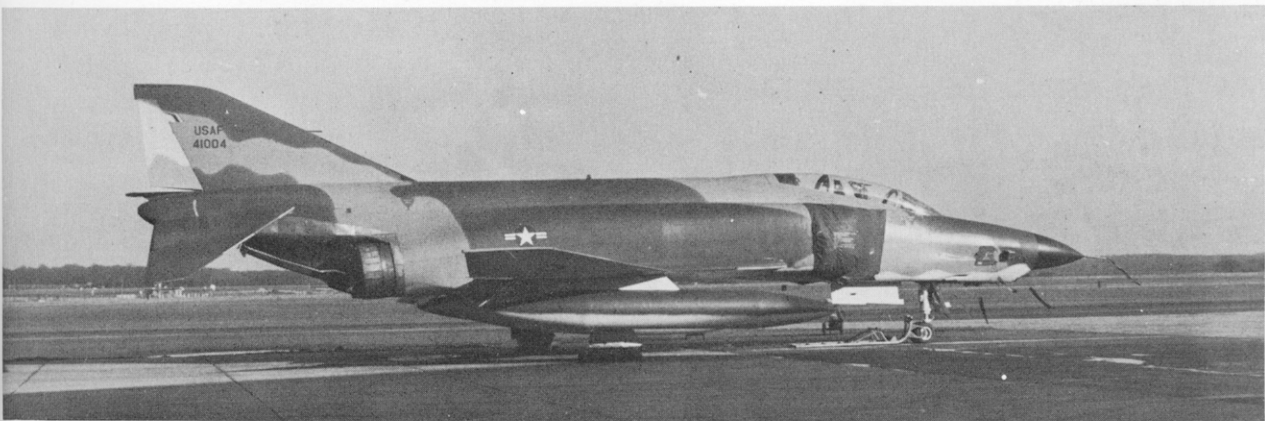




Above: In flight view of RF-4C of the 1 TRS, 10 TRW, note early presentation of code. (D. W. Menard via R. J. Francillon)

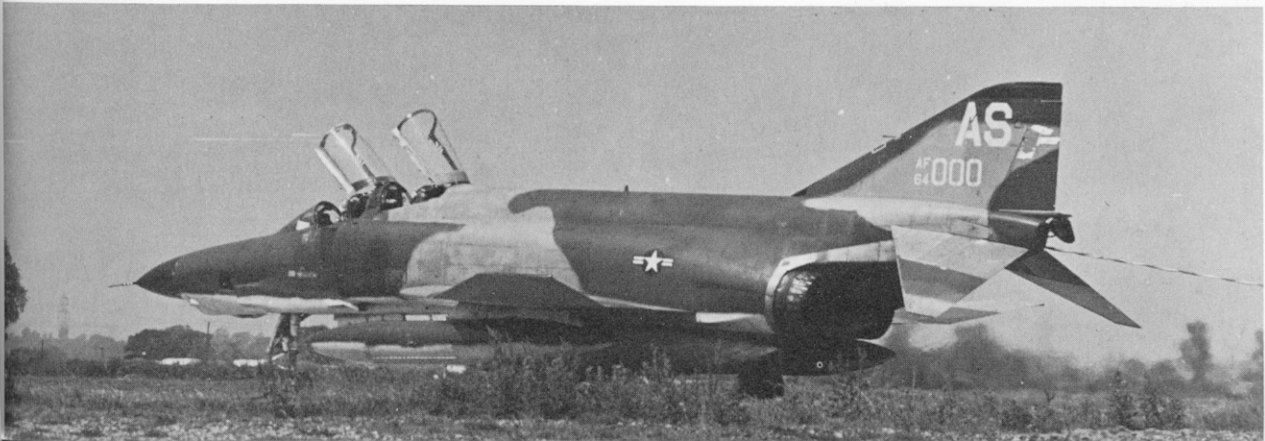


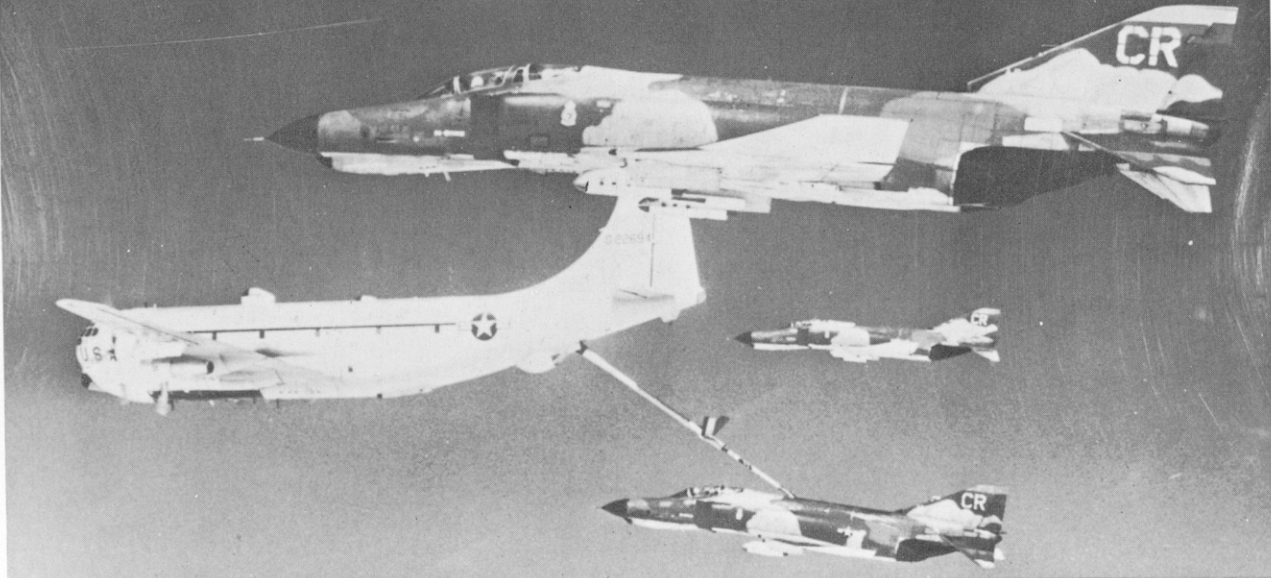
Above: Probably due to excessive time being spent in maintenance, this RF-4C of the 32 TRS, 10 TRW, acquired the nick-name "Ramp Rat". RAF Alconbury, UK, 18 May 1968. (D. W. Menard via R. J. Francillon)



Above: With air intakes and camera ports protected against the elements this RF-4C of the 32 TRS, 10 TRW, waits on its hardstanding for the next mission. (D. W. Menard via R. J. Francillon)

Below: With tail chute streaming an RF-4C of the 30 TRS, 10 TRW lands at RAF Alconbury. (S. P. Peltz via R. J. Francillon)

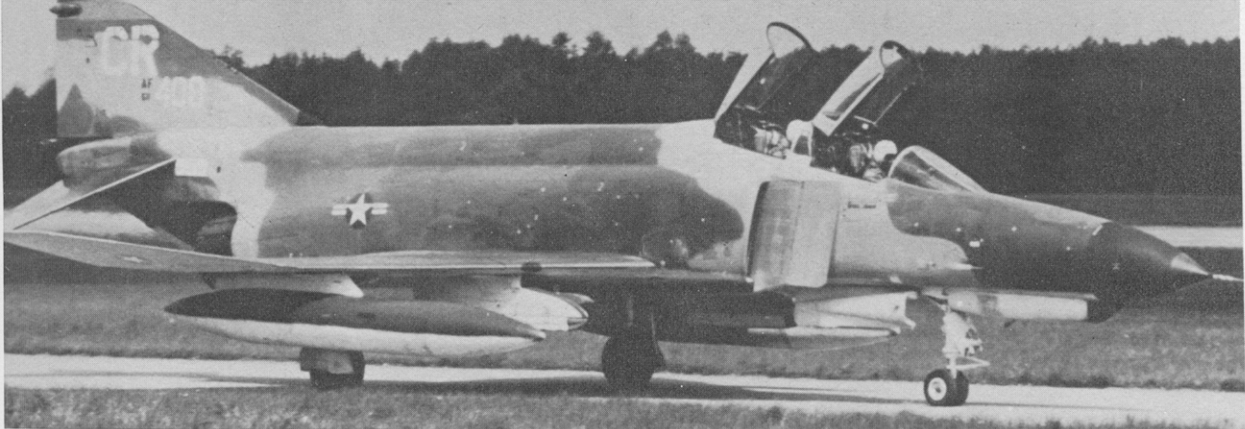




Above: F-4Es of the 32 TRS forming with a KC-97L tanker. (via A. P. de Jong)

Below: Formation of F-4Es of the 32 TRS low over typical Dutch countryside. (via A. P. de Jong)



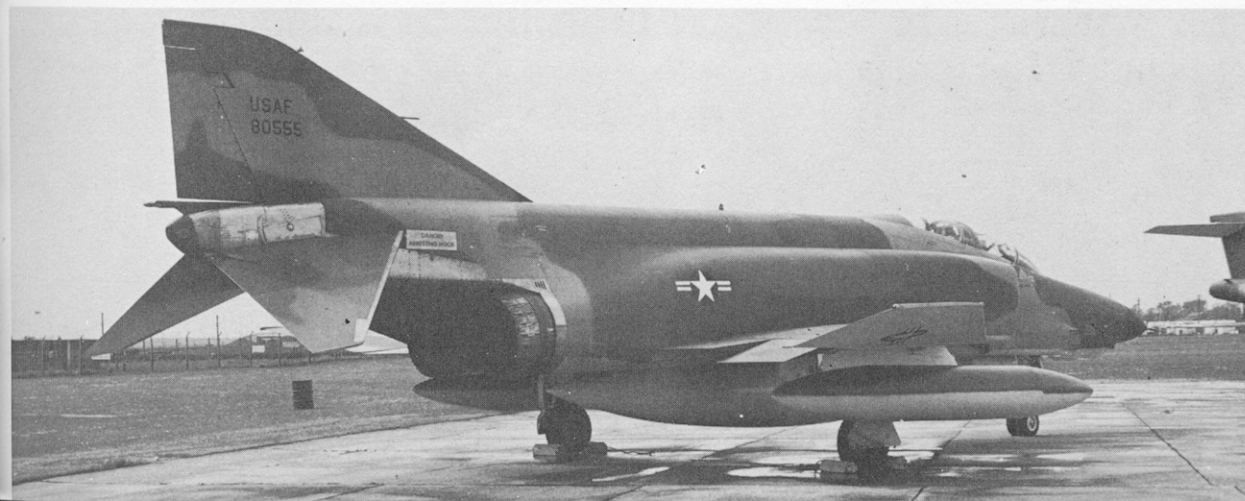


Above: F-4E of the 32 TRS landing at Soesterberg during 1970. (R. Flinzer)

Below: A pair of F-4Es of the 32 TRS forming with a pair of F-104s of No. 323 Squadron, Royal Neth. AF. (via A. P. de Jong)

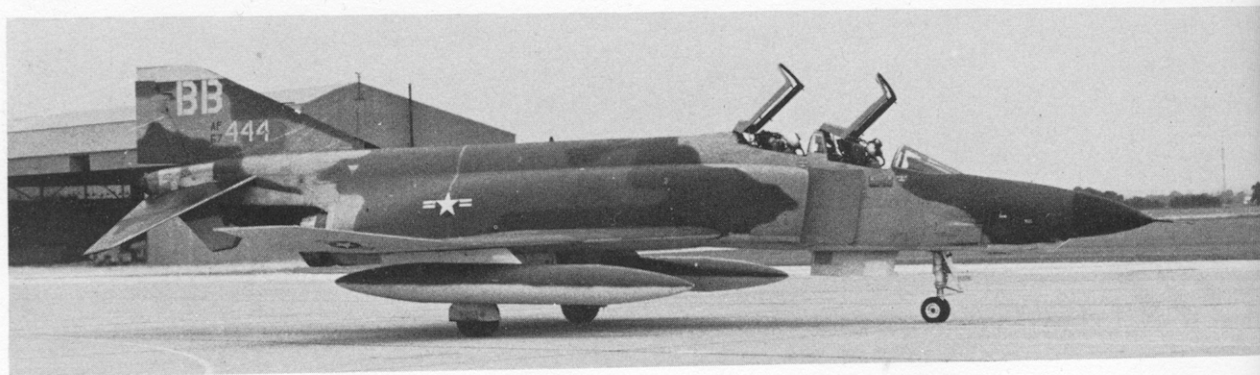


Below: Devoid of all unit identification markings, this RF-4C belongs to the 66 TRW. (D. W. Menard via R. J. Francillon)





Above: Nose detail is clearly shown in this photograph of an RF-4C of the 67 TRW. (N. Taylor/D. W. Menard via R. J. Francillon)



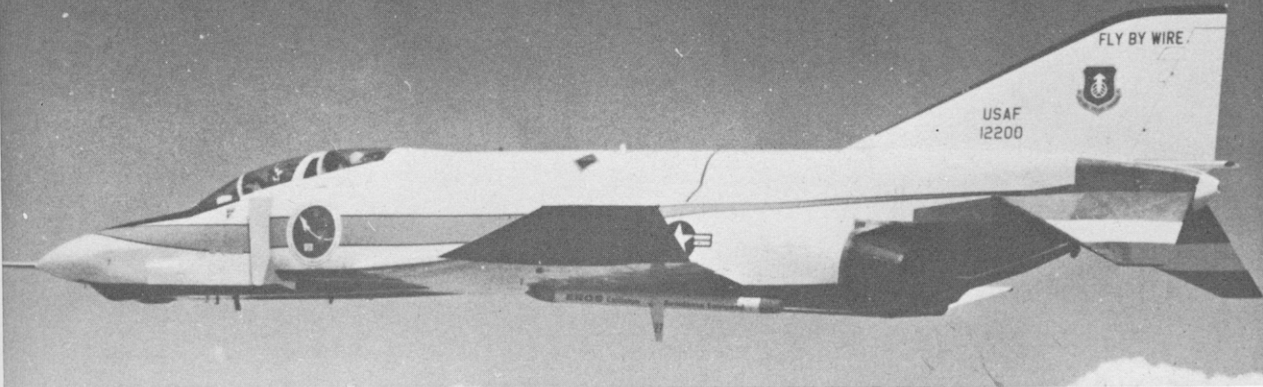
Above: Photographed at Bergstrom AFB, this RF-4C belongs to the 4 TRS, 75 TRW. (T. W. Van Geffen/D. W. Menard via R. J. Francillon)



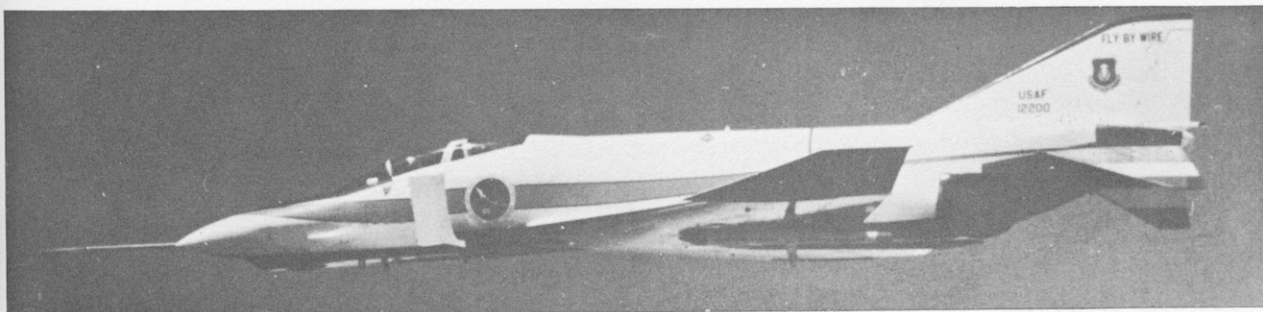
Above: An RF-4C of the 4416 Tactical Electronic Warfare Squadron (TEWS), 363 TRW, coming in to land at Lambert Field.

Below: F-4C of the 4453 CCTW stationed at Davis-Monthan AFB, photographed at Williams AFB, Arizona. (Bryan Baker/D. W. Menard via R. J. Francillon)

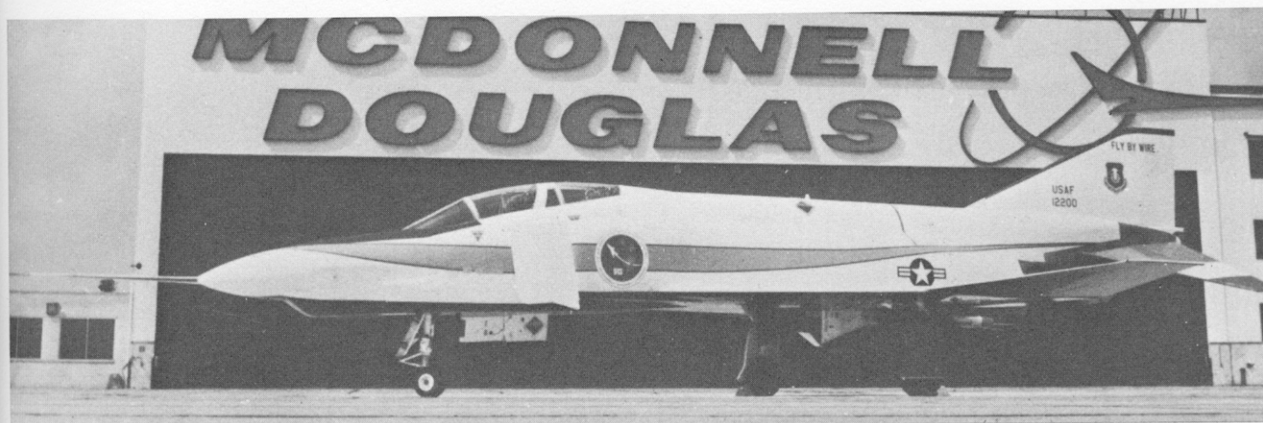




Above: Glossy white and dark blue YF-4E of Air Force Systems Command. (McDonnell)

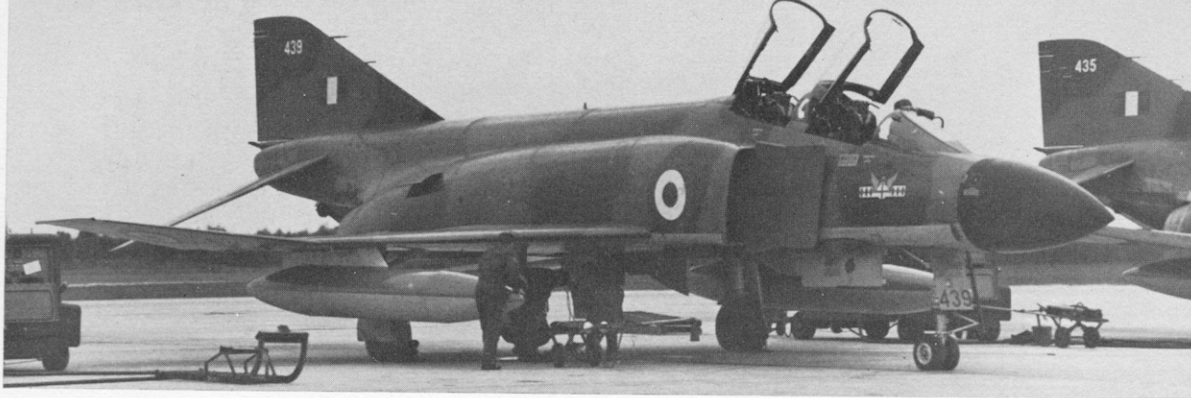


Above & below: "Fly By Wire" YF-4E, operated by McDonnell Douglas under contract to the US Air Force Flight Dynamics Laboratory are flying a three-axis, fly-by-wire (FBW) flight control system. The aircraft carries a set of four computers which constantly compare pilot commands and aircraft responses, and send precise signals to independently powered control surfaces. FBW improves aircraft stability for target tracking and weapons delivery. Pilot workload is greatly reduced and changes in flight path are smoother and with four separate channels of circuitry to carry commands, effects of battle damage or failure are minimized. (McDonnell)

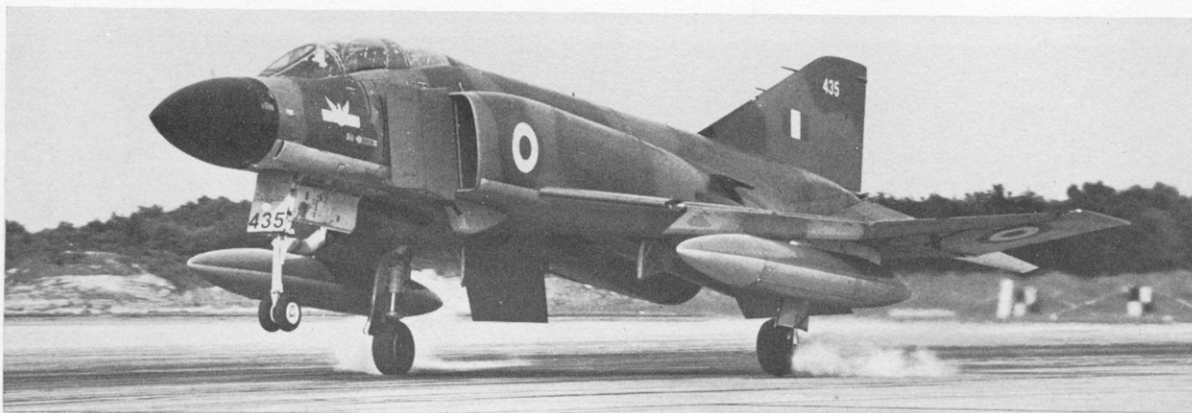


Below: Flying in the slot during precision manoeuvres, the fourth aircraft of the 4520 Air Demonstration Squadron, "The Thunderbirds" has its vertical tail surfaces blackened because of the exhaust of the twin J79 engines of the leader's aircraft. (Balogh/D. W. Menard via R. J. Francillon)





Above: FGR 2 of No. 14 Squadron, RAF on the hardstanding at Bruggen. (P. R. March)

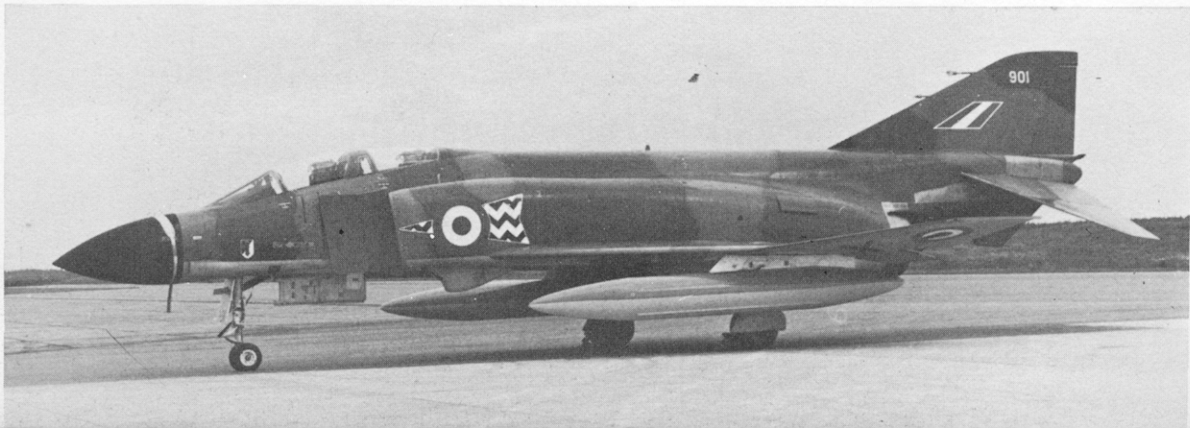


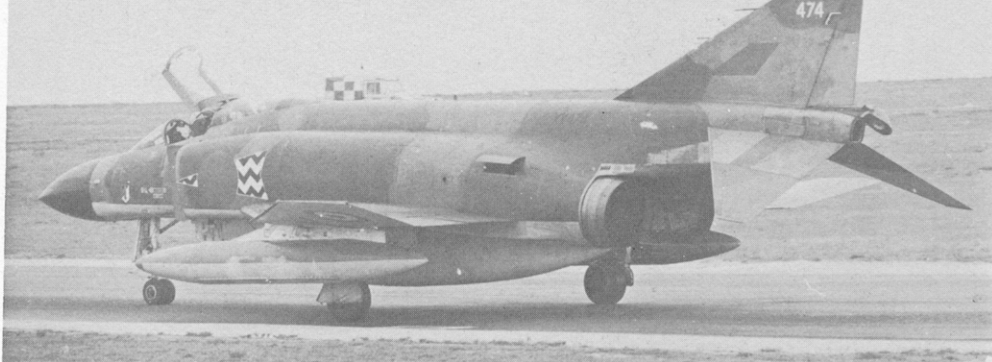
Above: With tyres smoking an FGR 2 of No. 14 Squadron lands at Bruggen after a familiarisation flight. The insignia transfer has not been applied. (P. R. March)



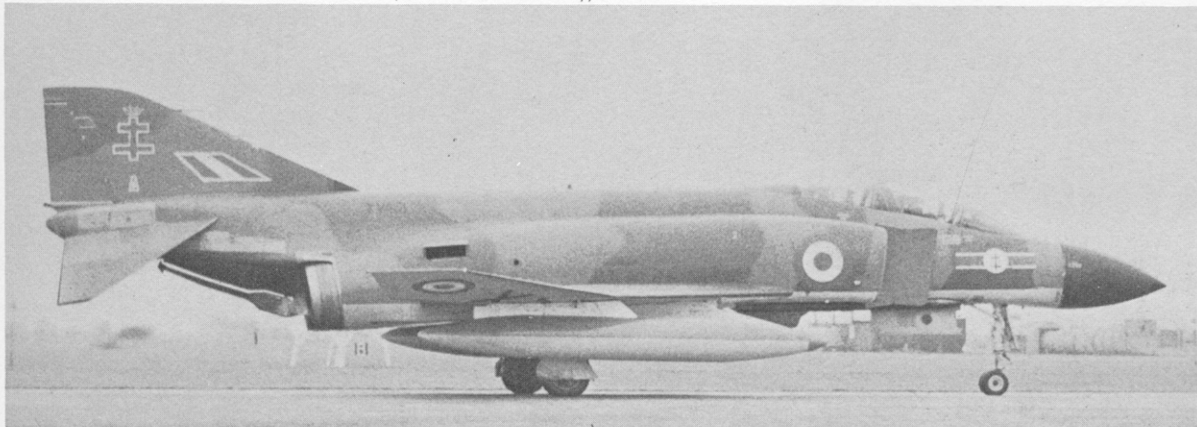
Above: FGR 2 of No. 14 Squadron outside the hanger at Bruggen. Serials of the above three aircraft are: XV439, XV435 and XV463. (P. R. March)

Below: FGR 2 of No. 17 Squadron displaying squadron marking and insignia, note raked fin flash. Serial XV901. (P. R. March)





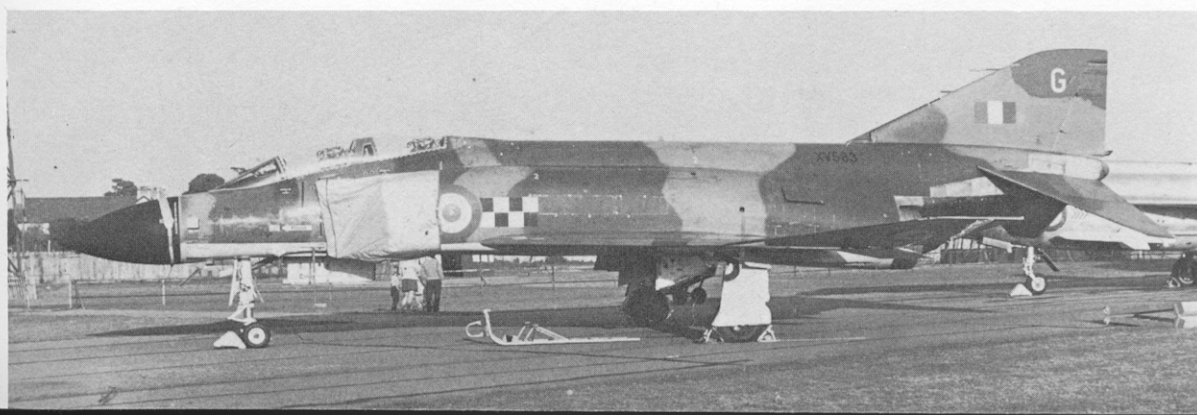
Above: Phantom FGR 2 of No. 17 Squadron landing at Luqa, Malta on 20 October 1972. Note the low visibility national insignia on upper surfaces and retention of the raked fin flash. Serial XV474. (Kevin Wood via R. Levy)

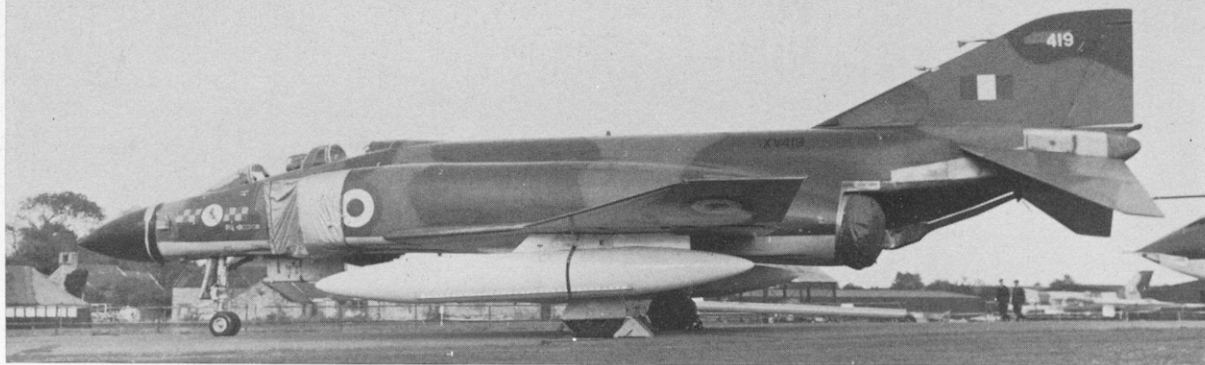


Above: FGR 2 of No. 41 Squadron photographed at Coningsby in September 1972. Serial XV401. (R. Levy)



Above & below: Port and starboard views of FG 1s of No. 43 Squadron, plainly displaying the camouflage pattern. Serials: top, XV577, lower XV583. (P. R. March)





Above: FGR 2, of No. 54 Squadron, serial XV419. (P. R. March)



Above: Line-up of Phantom FGR 2s of No. 229 OCU at Coningsby, Lincs., shortly after their delivery. (MoD via R. J. Francillon)

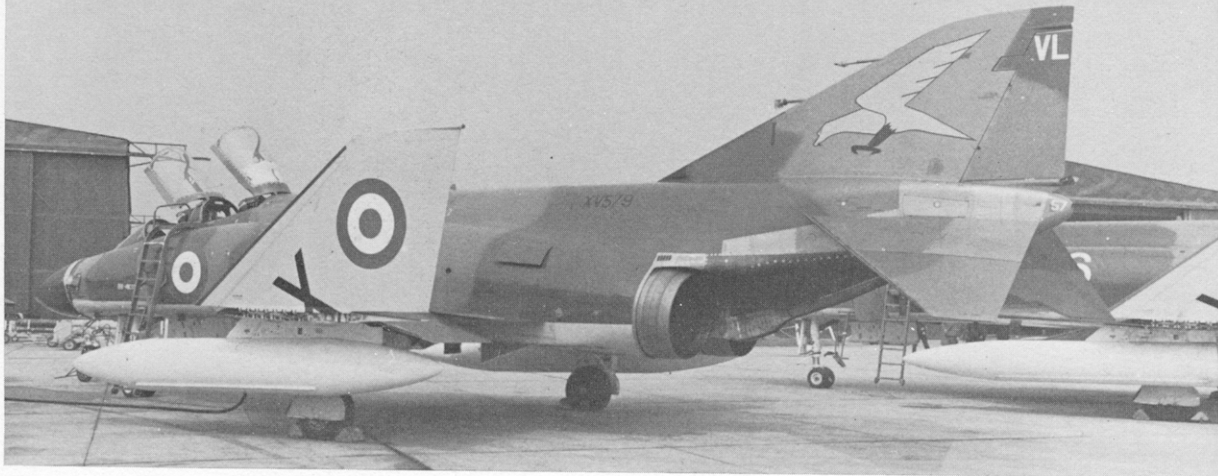
Below: FG 1 of No. 700P Squadron, FAA. Note the white VL on fin, serial XT860. (P. R. March)





Fine flying shots of FG 1s of No. 892 Squadron, FAA. The lower photo clearly shows the converging camouflage beneath the nose, typical of all FAA Phantoms. Note grey belly tanks. (Both photos P. R. March)



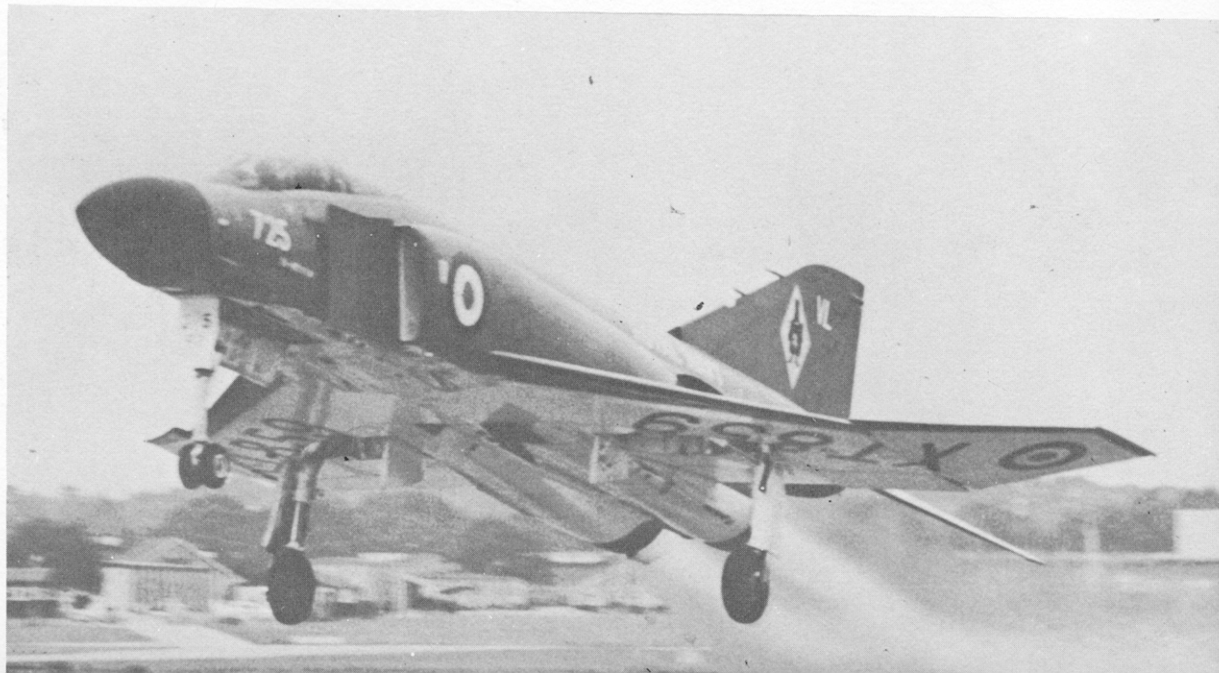


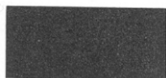
Above: FG 1 of No. 767 Squadron, FAA, and below right, close-up of fin insignia. Serial XV579. (P. R. March)

Below left: Close-up of insignia used by No. 892 Squadron for a short time.



Below: FG 1 of No. 892 Squadron taking-off on full bore. (Rolls-Royce via A. P. de Jong)





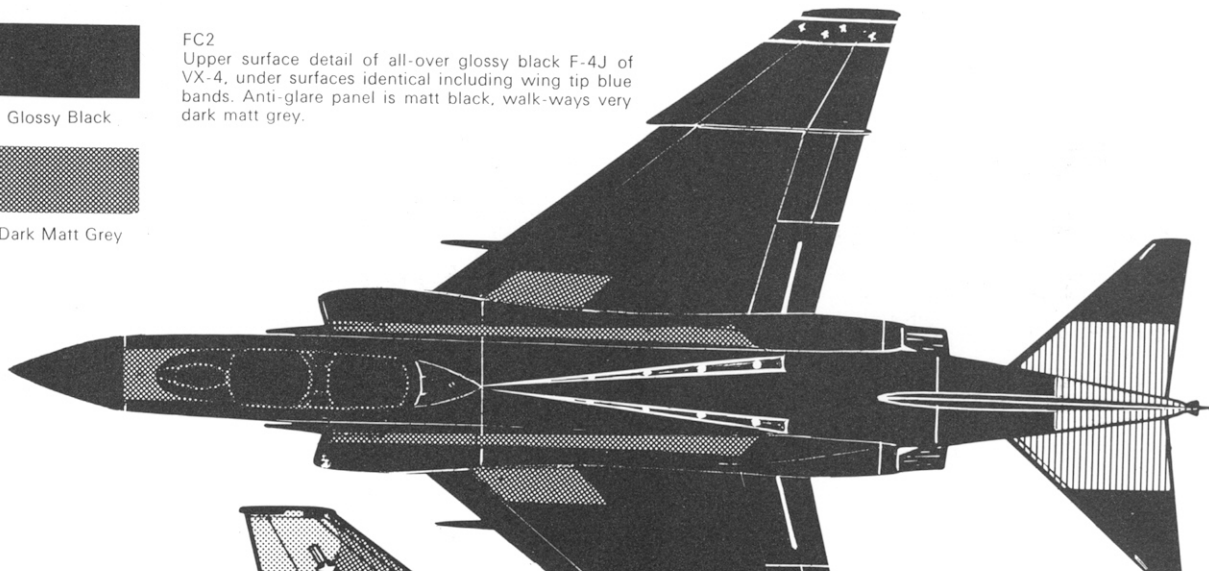
Glossy Black



Dark Matt Grey

FC2

Upper surface detail of all-over glossy black F-4J of VX-4, under surfaces identical including wing tip blue bands. Anti-glare panel is matt black, walk-ways very dark matt grey.



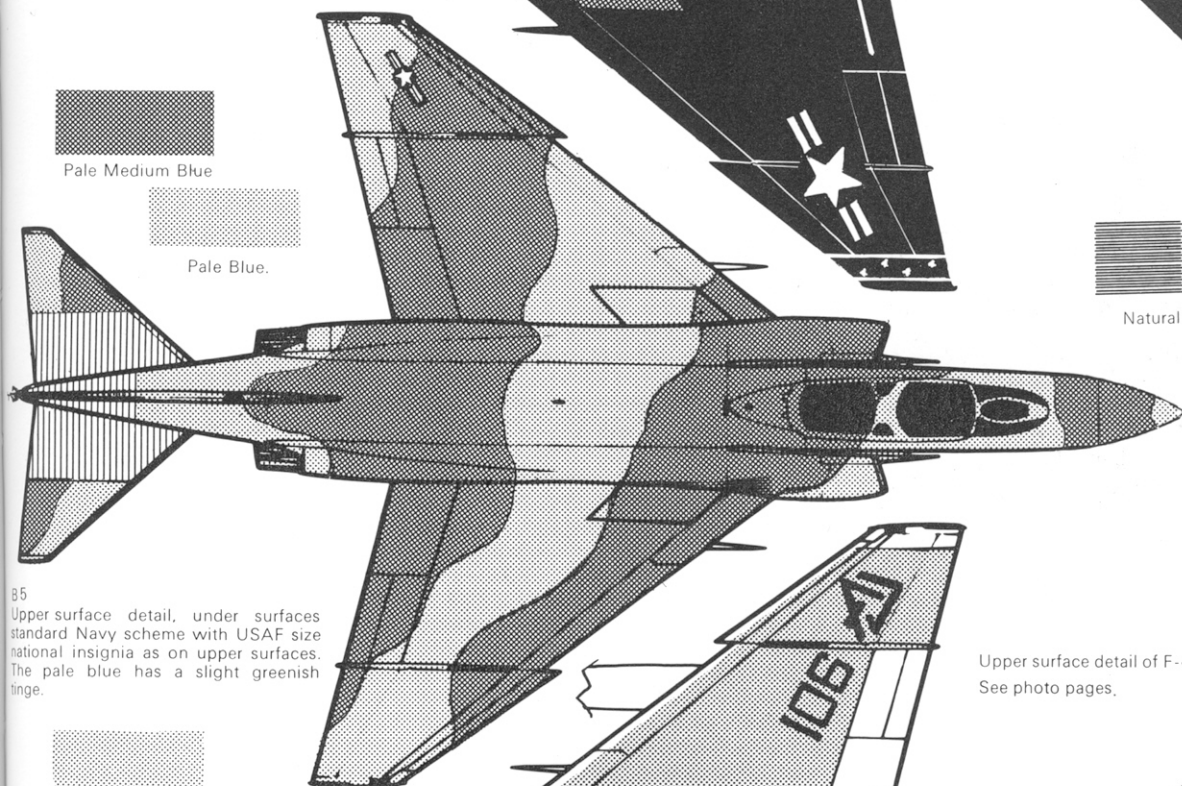
Pale Medium Blue



Pale Blue.



Natural Metal

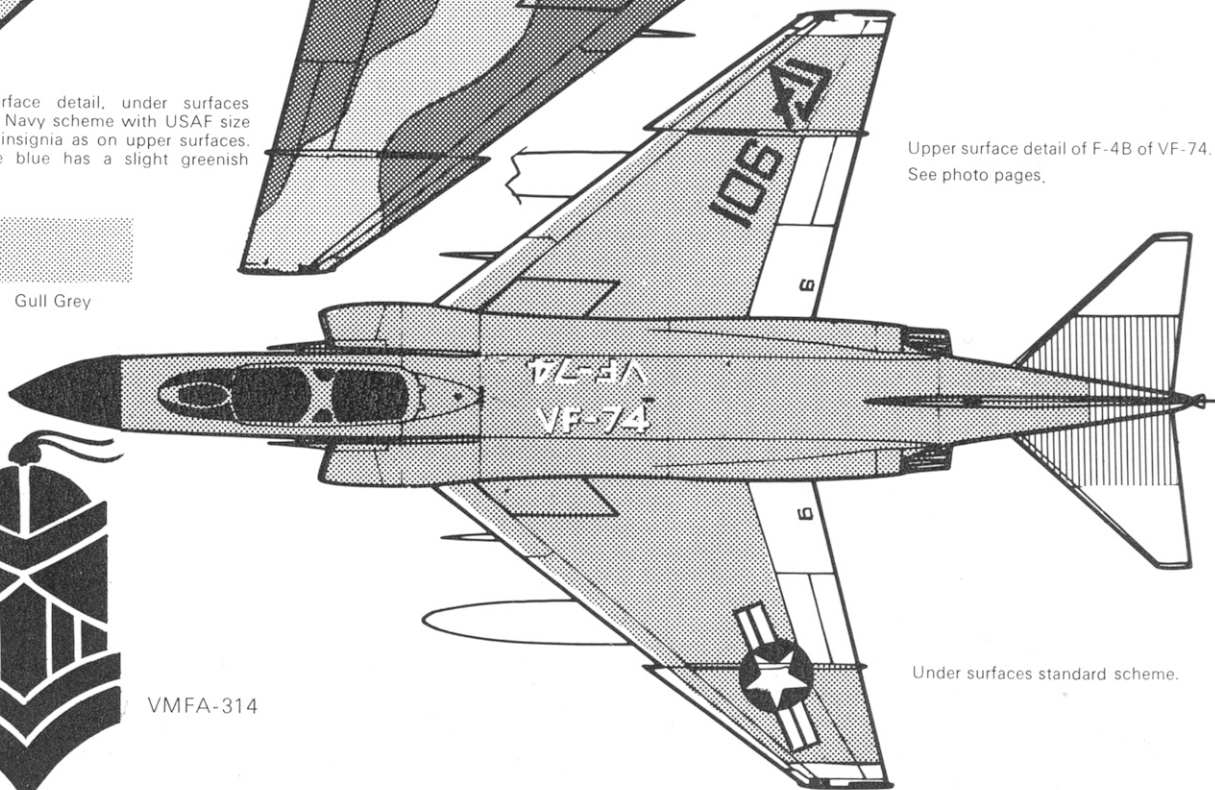


B5
Upper surface detail, under surfaces standard Navy scheme with USAF size national insignia as on upper surfaces. The pale blue has a slight greenish tinge.



Gull Grey

Upper surface detail of F-4B of VF-74. See photo pages.



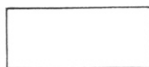
Under surfaces standard scheme.



VMFA-314

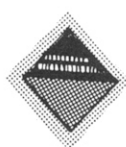


Dark Blue



White

Fuselage and nose wheel door marking. Red and blue diamond, white lettering on red outlined in pale blue as fuselage stripe.



The nose probe, not shown on drawings, see photos, is white with thin dark blue stripes down each side.

D4
Under surface detail except for natural metal areas aft of tail pipes in dark blue.

D4
Upper surface detail of glossy white YF-4C. Tail plane tips are dark blue. Note triangle marking on top decking of fuselage, repeated on both sides of nose wheel door, see photo.



Natural Metal



Red



Blue

12345678

Style of identification lettering in blue.

D5
Under surface detail of 1972/73 Thunderbird scheme.



Medium Green



Dark Green



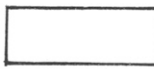
Sand



Natural Metal



Pale Grey



White

Thunderbird insignia.
Red bird, white star on
blue ground, black aircraft
and lettering. Red, white
and blue Unit
Citation beneath.

D5
Upper surface detail of
1972/73 Thunderbirds.

E3
Upper surface detail, see colour side-view for details of
colour stripes on air intakes. Standard USAF upper
surface scheme with minor variations of pattern aircraft
to aircraft.

E3
Under surface detail,
standard USAF scheme.

Position of Thunderbird insignia
on starboard side only.





Natural Metal



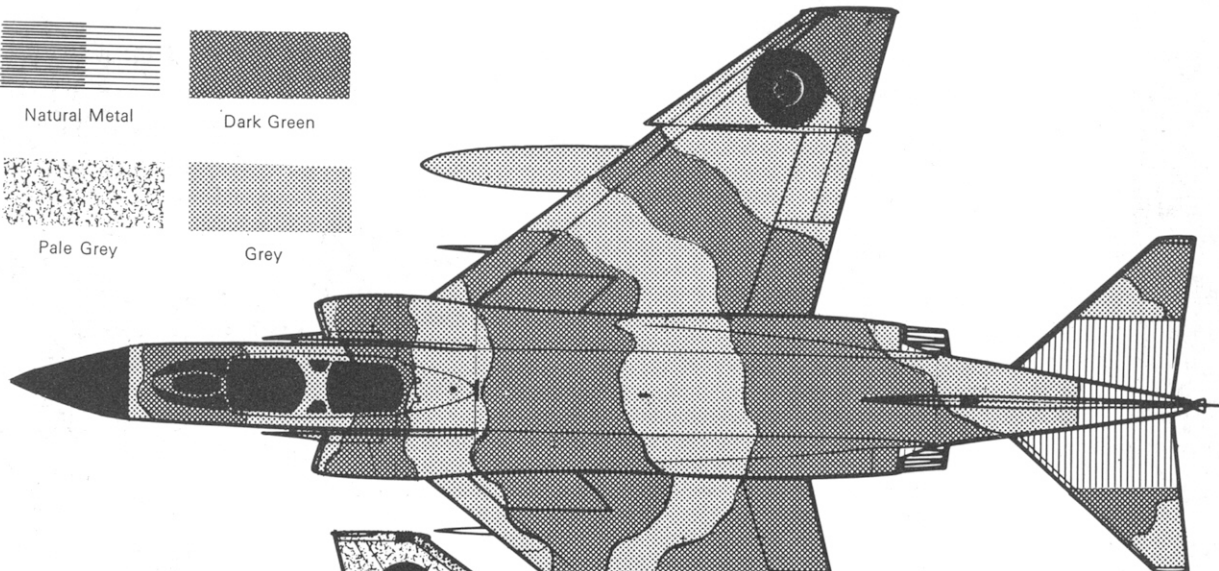
Dark Green



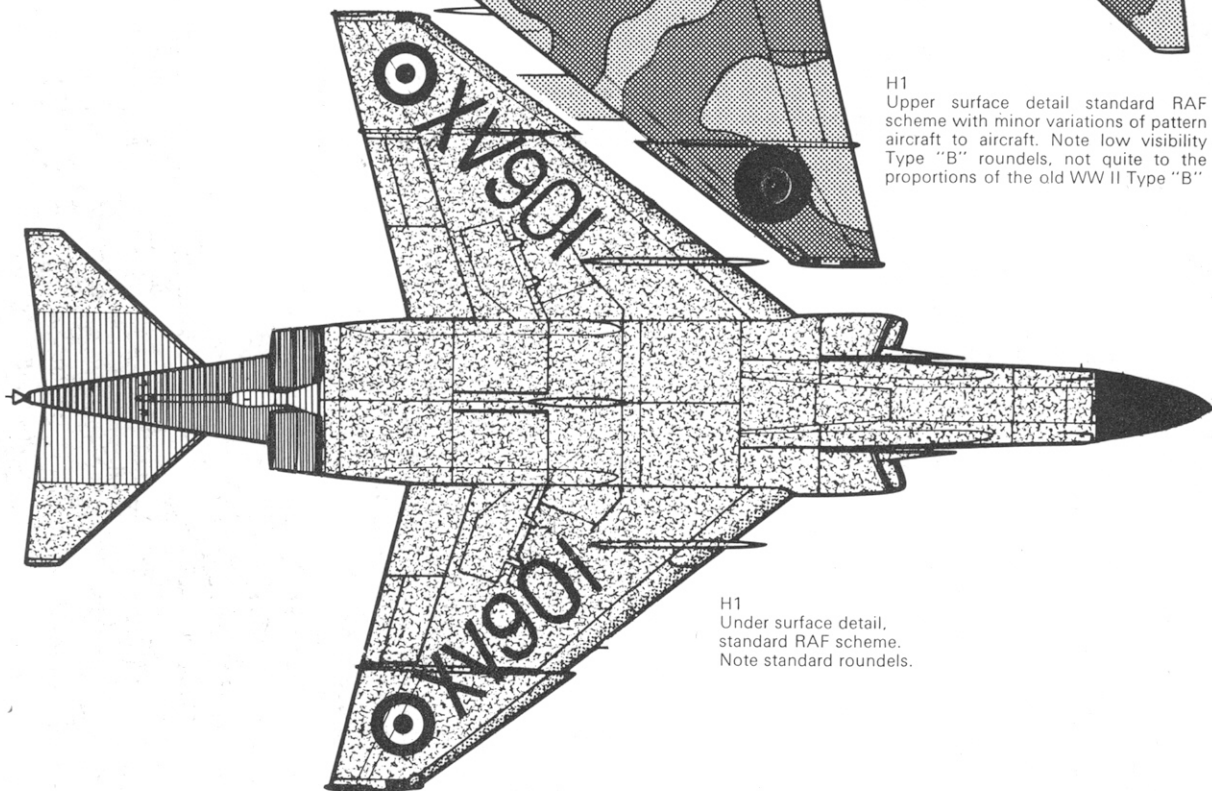
Pale Grey



Grey



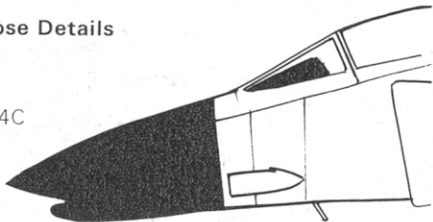
H1
Upper surface detail standard RAF
scheme with minor variations of pattern
aircraft to aircraft. Note low visibility
Type "B" roundels, not quite to the
proportions of the old WW II Type "B"



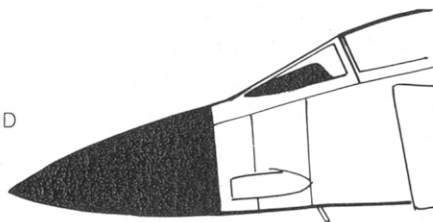
H1
Under surface detail,
standard RAF scheme.
Note standard roundels.

Nose Details

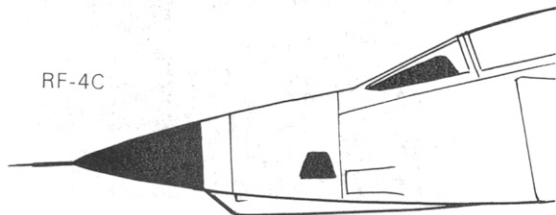
F-4C



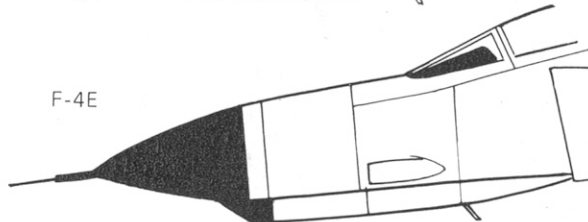
F-4D

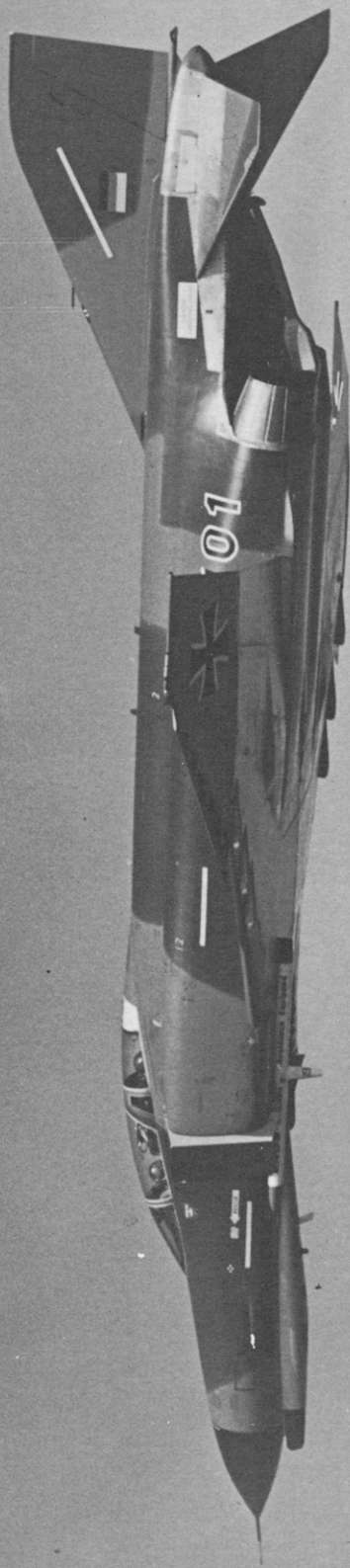


RF-4C



F-4E





F-4E for the West German Luftwaffe under test by the manufacturers.
Full code is 37+01, standard scheme, see Vol. 1. (McDonnell)



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- 28 De Havilland Mosquito
- 29 Nakajima Ki.84 Hayate

- 30 McDonnell F-4 Phantom
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West German Luftwaffe

Front cover, top to bottom:

- FC1 F-4B, VMFA-542, 151417.
 FC2 F-4J, VX-4, 153783. Operational Test and Evaluation Force, Point Mugu.
 FC3 F-4E, 469th TFS, 388th TFW.
 FC4 FGR.2, No. 14 Squadron, RAF Germany.